

1. Receive Data

■ Channel Voice Messages

● Control Change

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	ccH	vvH

n = MIDI Channel number : 0H - 0FH (ch.1 - ch.16)

cc = Controller number : 01H - 1FH (1 - 31),
: 21H - 3FH (32 - 63),
: 40H - 5FH (64 - 95),

vv = Control value : 00H - 7FH (0 - 127)

* When "MIDI: CC IN" is set to ON, the SDE-3000EVH receives only the channel of set to "MIDI: RX CH".

● Program Change

<u>Status</u>	<u>2nd byte</u>
CnH	ppH

n = MIDI Channel number : 0H - FH (ch.1 - ch.16)

pp = Program number : 00H - 7FH (prog.1 - prog.128)

* When "MIDI: PC IN" is set to ON, the SDE-3000EVH receives only the channel number that set "MIDI: RX CH".

* The correspondence between the program number and the memory number follows by "PC MAP" parameter.

※ The SDE-3000EVH ignores BANK SELECT (controller number: 0, 32) messages.

■ System Realtime Messages

● Timing Clock

<u>Status</u>
F8H

* When "MIDI: SYNC" is set to other than INTERNAL, the SDE-3000EVH receives the timing clock. After receiving the timing clock, the SDE-3000EVH set the tempo corresponding to timing clock.

* When "MIDI: SYNC" is set to INTERNAL, the SDE-3000EVH ignores the timing clock.

● Active Sensing

<u>Status</u>
FEH

* After receiving the active sensing, the SDE-3000EVH will begin monitoring the interval of all further messages. While monitoring, if the interval between messages exceeds 512 ms, the SDE-3000EVH changes to the internal tempo.

■ System Exclusive Messages

<u>Status</u>	<u>Data byte</u>	<u>Status</u>
F0H	iiH, ddH,, eeH	F7H

F0H: System Exclusive Message status
ii = ID number: an ID number (manufacturer ID) to indicate the manufacturer whose Exclusive message this is. Roland's manufacturer ID is 41H. ID numbers 7EH is extensions of the MIDI standard; Universal Non-realtime Messages (7EH).

dd, ..., ee = data: 00H~7FH (0~127)

F7H: EOX (End Of Exclusive)

● Universal Non-realtime System Exclusive Messages

OIDentity Request Message

<u>Status</u>	<u>Data byte</u>	<u>Status</u>
F0H	7EH, dev, 06H, 01H	F7H

<u>Byte</u>	<u>Explanation</u>
F0H:	Exclusive status
7EH:	ID number (Universal Non-realtime Message)
dev:	Device ID (dev:10H - 1FH, 7FH) * 7FH = Broadcast
06H:	Sub ID # 1 (General Information)
01H:	Sub ID # 2 (Identity Request)
F7H:	EOX (End Of Exclusive)

* When this message is received, the SDE-3000EVH will transmit Identity Reply message.

ORequest Data 1 RQ1 (11H)

This message is used to get the parameters.

<u>Status</u>	<u>Data byte</u>	<u>Status</u>
F0H,	41H, dev, 01H, 05H, 00H, 11H, aaH, bbH, ccH, ddH, ssH, ttH, uuH, vvH, sum,	F7H

<u>Byte</u>	<u>Explanation</u>
F0H:	Exclusive status
41H:	Manufacturer ID (Roland)
dev:	Device ID (dev: 10H - 1FH, 7FH) * 7FH = broadcast
01H:	Model ID # 1 (SDE-3000EVH)
05H:	Model ID # 2 (SDE-3000EVH)
00H:	Model ID # 3 (SDE-3000EVH)
11H:	Command ID (RQ1)
aaH:	Address MSB
bbH:	Address
ccH:	Address
ddH:	Address LSB
ssH:	Size MSB
ttH:	Size
uuH:	Size
vvH:	Size LSB
sum:	Checksum
F7H:	EOX (End Of Exclusive)

* When the value of device ID is same the value of "MIDI:DEVICE ID" or 7FH, the SDE-3000EVH receives this message.

OData set 1 DT1 (12H)

This message is set the value of parameters and memorized.

Status	Data byte	Status
F0H,	41H, dev, 01H, 05H, 00H,	F7H
	12H, aaH, bbH, ccH, ddH,	
	eeH, ... hhH, sum,	

Byte	Explanation
F0H:	Exclusive status
41H:	Manufacturer ID (Roland)
dev:	Device ID (dev:10H – 1FH, 7FH) * 7FH = broadcast
01H:	Model ID # 1 (SDE-3000EVH)
05H:	Model ID # 2 (SDE-3000EVH)
00H:	Model ID # 3 (SDE-3000EVH)
12H:	Command ID (DT1)
aaH:	Address MSB
bbH:	Address
ccH:	Address
ddH:	Address LSB
eeH:	Data
:	
ffH:	Data
sum:	Checksum
F7H:	EOX (End Of Exclusive)

2. Transmit data

* When “MIDI: THRU” is set to ON, all received messages except for realtime messages are transmitted.

■Channel Voice Messages

●Control Change

Status	2nd byte	3rd byte
BnH	ccH	vvH

n = MIDI Channel number	: 0H – FH (ch.1 - ch.16)
cc = Controller number	: 01H – 1FH (1 - 31), 21H - 3FH (33 - 63), 40H – 5FH (64 - 95)
vv = Control value	: 00H - 7FH (0 - 127)

* When “MIDI: CC OUT” is set to ON, the SDE-3000EVH transmits this message with the channel value set to the “MIDI: TX CH”. If “MIDI: TX CH” is set to OFF, the SDE-3000EVH does not transmit any messages.

●Program Change

Status	2nd byte
CnH	ppH

n = MIDI Channel number	: 0H - FH (ch.1 - ch.16)
pp = Program number	: 00H - 7FH (prog.1 - prog.128)

* When “MIDI: PC OUT” is set to ON, the SDE-3000EVH transmits this message with the channel value set to the “MIDI: TX CH”. If “MIDI: TX CH” is set to OFF, the SDE-3000EVH does not transmit any messages.

■System Realtime Messages

●Timing Clock

Status
F8H

* When “MIDI: REALTIME SOURCE” is set to INTERNAL, the SDE-3000EVH transmits the timing clock of the interval corresponding to “BPM”.

* When “MIDI: REALTIME SOURCE” is set to MIDI, the SDE-3000EVH transmits the timing clock when receives the timing clock.

●Active Sensing

Status
FEH

* The SDE-3000EVH transmits active sensing at intervals of approximately 256 ms.

■System Exclusive messages

When the appropriate “Identity Request Message” and “Data Request 1 (RQ1)” message are received, the requested data will be transmitted.

●Universal Non-realtime System Exclusive message

0Identity Reply message

Status	Data byte	Status
F0H	7EH, dev, 06H, 02H, 41H,	F7
	00H, 05H, 00H, 00H,	
	r1, r2, r3, r4	

Byte	Explanation
F0H:	Exclusive status
7EH:	ID number (Universal non-realtime message)
dev:	Device ID (dev:10H – 1FH)
06H:	Sub ID # 1 (General Information)
02H:	Sub ID # 2 (Identity Reply)
41H:	Manufacturer ID (Roland)
00H 05H:	Device family code (SDE-3000EVH)
00H 00H:	Device family number code
r1 r2 r3 r4:	Software revision level (00H 00H 00H 00H)
F7H:	EOX (End Of Exclusive)

* When the SDE-3000EVH received Identity Request message, the SDE-3000EVH transmits this message.

OData set1 DT1 (12H)

Status	Data byte	Status
F0H,	41H, dev, 01H, 05H, 00H,	F7H
	12H, aaH, bbH, ccH, ddH,	
	eeH, ... ffH, sum,	

Byte	Explanation
F0H:	Exclusive status
41H:	Manufacturer ID (Roland)
dev:	Device ID (dev: 10H – 1FH)
01H:	Model ID # 1 (SDE-3000EVH)
05H:	Model ID # 2 (SDE-3000EVH)
00H:	Model ID # 3 (SDE-3000EVH)
12H:	Command ID (DT1)
aaH:	Address MSB
bbH:	Address
ccH:	Address

ddH: Address LSB
eeH: Data
:
ffH: Data
sum: Checksum
F7H: EOX (End Of Exclusive)

* When proper message is received, the SDE-3000EVH transmits the value of the parameters.

3. System Exclusive Address Map

SDE-3000EVH (Model ID: 01H 05H 00H)		
Start Address	Description	
00 00 00 00	SYSTEM	
10 00 00 00	MIDI PC MAP	
20 00 00 00	MEMORY (temporary)	
20 10 00 00	MEMORY EVH1	
20 20 00 00	MEMORY EVH2	
20 30 00 00	MEMORY EVH3	
2C 40 00 00	MEMORY C.84	

* SYSTEM

Offset Address	Description	
00 00 00	SYSTEM	
00 10 00	MIDI	

* MIDI PC MAP

Offset Address	Description	
00 00 00	MIDI PC MAP	

* MEMORY

Offset Address	Description	
00 00 00	EFFECT	
00 10 00	CTL	
00 20 00	ASSIGN	

* SYSTEM Parameters Offset Address

Offset Address	Description	
00 00	0000 000d	Input setting (0 - 1) MONO, STEREO
00 01	0000 00dd	Output setting (0 - 2) STEREO, DIR.EFX, DIR.MUTE
00 02	0000 00dd	Input level (0 - 2) 4D, -10D, -20D
00 03	0ddd dddd	Input volume (1 - 100)
00 04	0000 000d	Direct mode (0 - 1) DSP, ANLG
00 05	0ddd dddd	Memory extent min (0 - 99) EVH1 - C.84
00 06	0ddd dddd	Memory extent max (0 - 99) EVH1 - C.84
00 07	0000 000d	EXP1 Pedal Hold (0 - 1) OFF, ON
00 08	0000 000d	EXP2 Pedal Hold (0 - 1) OFF, ON
00 09	0000 000d	TAP/CTL1 preference (0 - 1) MEMORY, SYSTEM
00 0A	0000 000d	CTL2 preference (0 - 1) MEMORY, SYSTEM
00 0B	0000 000d	CTL3 preference (0 - 1) MEMORY, SYSTEM
00 0C	0000 000d	CTL4 preference (0 - 1) MEMORY, SYSTEM

00 0D	0000 000d	CTL5 preference (0 - 1) MEMORY, SYSTEM
00 0E	0000 000d	EXP1 preference (0 - 1) MEMORY, SYSTEM
00 0F	0000 000d	EXP2 preference (0 - 1) MEMORY, SYSTEM
00 10	000d dddd	TAP/CTL1 Function (0 - 19) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET
00 11	000d dddd	CTL2 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 12	000d dddd	CTL3 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 13	000d dddd	CTL4 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 14	000d dddd	CTL5 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 15	0000 dddd	EXP1 Function (0 - 14) OFF, FV, D1.TIM.L, D1.TIM.R, D2.TIM.L, D2.TIM.R, D1.FBK, D2.FBK, D1.OUT, D2.OUT, D1.M.RAT, D2.M.RAT, D1.M.DPT, D2.M.DPT, DIR.LVL
00 16	0000 dddd	EXP2 Function (0 - 14) OFF, FV, D1.TIM.L, D1.TIM.R, D2.TIM.L, D2.TIM.R, D1.FBK, D2.FBK, D1.OUT, D2.OUT, D1.M.RAT, D2.M.RAT, D1.M.DPT, D2.M.DPT, DIR.LVL
00 17	0000 000d	TAP/CTL1 Mode (0 - 1) TOGGLE, MOMENT
00 18	0000 000d	CTL2 Mode (0 - 1) TOGGLE, MOMENT
00 19	0000 000d	CTL3 Mode (0 - 1) TOGGLE, MOMENT

00 1A	0000 000d	CTL4 Mode (0 - 1) TOGGLE, MOMENT
00 1B	0000 000d	CTL5 Mode (0 - 1) TOGGLE, MOMENT
00 1C	0ddd dddd	CTL2 Memory number (0 - 99) EVH1 - C.84
00 1D	0ddd dddd	CTL3 Memory number (0 - 99) EVH1 - C.84
00 1E	0ddd dddd	CTL4 Memory number (0 - 99) EVH1 - C.84
00 1F	0ddd dddd	CTL5 Memory number (0 - 99) EVH1 - C.84
00 20	0ddd dddd	TAP/CTL1 DDL1 Hold Level (0 - 120)
00 21	0ddd dddd	TAP/CTL1 DDL2 Hold Level (0 - 120)
00 22	0ddd dddd	CTL2 DDL1 Hold Level (0 - 120)
00 23	0ddd dddd	CTL2 DDL2 Hold Level (0 - 120)
00 24	0ddd dddd	CTL3 DDL1 Hold Level (0 - 120)
00 25	0ddd dddd	CTL3 DDL2 Hold Level (0 - 120)
00 26	0ddd dddd	CTL4 DDL1 Hold Level (0 - 120)
00 27	0ddd dddd	CTL4 DDL2 Hold Level (0 - 120)
00 28	0ddd dddd	CTL5 DDL1 Hold Level (0 - 120)
00 29	0ddd dddd	CTL5 DDL2 Hold Level (0 - 120)
00 2A	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	EXP1 min * The value depends on the function.
00 2E	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	EXP1 max * The value depends on the function.
00 32	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	EXP2 min * The value depends on the function.
00 36	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	EXP2 max * The value depends on the function.
00 3A	0000 000d	GA-FC Function sw (0 - 1) OFF, ON
00 3B	0000 dddd	GA-FC EXP1/VOLUME Function (0 - 14) OFF, FV, D1.TIM.L, D1.TIM.R, D2.TIM.L, D2.TIM.R, D1.FBK, D2.FBK, D1.OUT, D2.OUT, D1.M.RAT, D2.M.RAT, D1.M.DPT, D2.M.DPT, DIR.LVL
00 3C	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	GA-FC EXP1/VOLUME Target min * The value depends on the function.
00 40	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	GA-FC EXP1/VOLUME Target max * The value depends on the function.

00 44	0000 dddd	GA-FC EXP2/FX Function (0 - 14) OFF, FV, D1.TIM.L, D1.TIM.R, D2.TIM.L, D2.TIM.R, D1.FBK, D2.FBK, D1.OUT, D2.OUT, D1.M.RAT, D2.M.RAT, D1.M.DPT, D2.M.DPT, DIR.LVL
00 45	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	GA-FC EXP2/Fx Target min * The value depends on the function.
00 49	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	GA-FC EXP2/FX Target max * The value depends on the function.
00 4D	000d dddd	GA-FC Volume SW function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 4E	000d dddd	GA-FC FX SW Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 4F	000d dddd	GA-FC CH 1 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 50	000d dddd	GA-FC CH 2 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 51	000d dddd	GA-FC CH 3 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 52	000d dddd	GA-FC CH 4 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM,

		D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 53	000d dddd	GA-FC PANEL Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 54	000d dddd	GA-FC EFFECTS Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 55	0000 000d	GA-FC Volume Sw Mode (0 - 1) TOGGLE, MOMENT
00 56	0000 000d	GA-FC FX Sw Mode (0 - 1) TOGGLE, MOMENT
00 57	0000 000d	GA-FC CH 1 Mode (0 - 1) TOGGLE, MOMENT
00 58	0000 000d	GA-FC CH 2 Mode (0 - 1) TOGGLE, MOMENT
00 59	0000 000d	GA-FC CH 3 Mode (0 - 1) TOGGLE, MOMENT
00 5A	0000 000d	GA-FC CH 4 Mode (0 - 1) TOGGLE, MOMENT
00 5B	0000 000d	GA-FC PANEL SW Mode (0 - 1) TOGGLE, MOMENT
00 5C	0000 000d	GA-FC EFFECTS Sw Mode (0 - 1) TOGGLE, MOMENT
00 5D	0ddd dddd	GA-FC VOLUME Sw Mem# (0 - 99) EVH1 - C.84
00 5E	0ddd dddd	GA-FC FX Sw Mem# (0 - 99) EVH1 - C.84
00 5F	0ddd dddd	GA-FC CH1 Mem# (0 - 99) EVH1 - C.84
00 60	0ddd dddd	GA-FC CH2 Mem# (0 - 99) EVH1 - C.84
00 61	0ddd dddd	GA-FC CH3 Mem# (0 - 99) EVH1 - C.84
00 62	0ddd dddd	GA-FC CH4 Mem# (0 - 99) EVH1 - C.84
00 63	0ddd dddd	GA-FC PANEL Mem# (0 - 99) EVH1 - C.84
00 64	0ddd dddd	GA-FC EFFECTS Mem# (0 - 99) EVH1 - C.84
00 65	0ddd dddd	GA-FC VOLUME Sw DDL1 Hold level (0 - 120)
00 66	0ddd dddd	GA-FC VOLUME Sw DDL2 Hold level (0 - 120)

00 67	0ddd dddd	GA-FC FX Sw DDL1 Hold level (0 - 120)
00 68	0ddd dddd	GA-FC FX Sw DDL2 Hold level (0 - 120)
00 69	0ddd dddd	GA-FC CH.1 DDL1 Hold level (0 - 120)
00 6A	0ddd dddd	GA-FC CH.1 DDL2 Hold level (0 - 120)
00 6B	0ddd dddd	GA-FC CH.2 DDL1 Hold level (0 - 120)
00 6C	0ddd dddd	GA-FC CH.2 DDL2 Hold level (0 - 120)
00 6D	0ddd dddd	GA-FC CH.3 DDL1 Hold level (0 - 120)
00 6E	0ddd dddd	GA-FC CH.3 DDL2 Hold level (0 - 120)
00 6F	0ddd dddd	GA-FC CH.4 DDL1 Hold level (0 - 120)
00 70	0ddd dddd	GA-FC CH.4 DDL2 Hold level (0 - 120)
00 71	0ddd dddd	GA-FC PANEL DDL1 Hold level (0 - 120)
00 72	0ddd dddd	GA-FC PANEL DDL2 Hold level (0 - 120)
00 73	0ddd dddd	GA-FC EFFECTS DDL1 Hold level (0 - 120)
00 74	0ddd dddd	GA-FC EFFECTS DDL2 Hold level (0 - 120)
00 75	0000 00dd	Display mode (0 - 3) INPUT LEVEL, VALUE, BPM, MEMORY
00 76	0000 000d	Pedal SW mode (0 - 1) MANUAL, MEMORY
00 77	0000 000d	Memory mode (0 - 1) IMMEDIT, WAIT
00 78	0000 000d	Foot Volume Preference (0 - 1) MEMORY, SYSTEM
00 79	0000 000d	Foot Volume SW (0 - 1) OFF, ON
00 7A	0ddd dddd	Pedal position (0 - 100)
00 7B	0ddd dddd	Volume min (0 - 100)
00 7C	0ddd dddd	Volume max (0 - 100)
00 7D	0000 00dd	FV curve (0 - 3) SLOW1, SLOW2, NORMAL, FAST
00 7E	0000 000d	Send/Return Preference (0 - 1) MEMORY, SYSTEM
00 7F	0000 000d	Send/Return SW (0 - 1) OFF, ON
01 00	0ddd dddd	Return Level (0 - 100)
01 01	0000 000d	Noise Suppressor Preference (0 - 1) MEMORY, SYSTEM
01 02	0000 000d	Noise suppressor SW (0 - 1) OFF, ON

01 03	0ddd dddd	Noise suppressor threshold (0 - 100)
01 04	0ddd dddd	Noise suppressor release (0 - 100)

* MIDI Parameters Offset Address

Offset Address	Description	
00 00	000d dddd	MIDI Rx Channel (0 - 16) OFF, CH.1 - CH.16
00 01	000d dddd	MIDI Tx Channel (0 - 17) OFF, CH.1 - CH.16, RX
00 02	0000 000d	MIDI PC in SW (0 - 1) OFF, ON
00 03	0000 000d	MIDI PC out SW (0 - 1) OFF, ON
00 04	0000 000d	MIDI CC in SW (0 - 1) OFF, ON
00 05	0000 000d	MIDI CC out SW (0 - 1) OFF, ON
00 06	00dd dddd	MIDI DDL1 L time cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 07	00dd dddd	MIDI DDL1 R time cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 08	00dd dddd	MIDI DDL2 L time cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 09	00dd dddd	MIDI DDL2 R time cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 0A	00dd dddd	MIDI DDL1 L feedback cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 0B	00dd dddd	MIDI DDL2 L feedback cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 0C	00dd dddd	MIDI DDL1 L output level cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 0D	00dd dddd	MIDI DDL2 L output level cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 0E	00dd dddd	MIDI DDL1 Mod. Rate cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 0F	00dd dddd	MIDI DDL2 Mod. Rate cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 10	00dd dddd	MIDI DDL1 Mod. Depth cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 11	00dd dddd	MIDI DDL2 Mod. Depth cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95

00 12	00dd dddd	MIDI TAP/CTL1 SW cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 13	00dd dddd	MIDI CTL2 SW cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 14	00dd dddd	MIDI CTL3 SW cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 15	00dd dddd	MIDI CTL4 SW cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 16	00dd dddd	MIDI CTL5 SW cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 17	00dd dddd	MIDI EXP1 cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 18	00dd dddd	MIDI EXP2 cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 19	00dd dddd	MIDI bypass SW cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 1A	00dd dddd	MIDI DDL1 on/off cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 1B	00dd dddd	MIDI DDL2 on/off cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 1C	00dd dddd	MIDI DDL1/DDL2 TAP func. cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 1D	00dd dddd	MIDI DDL1 L ch TAP func. cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 1E	00dd dddd	MIDI DDL1 R ch TAP func. cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 1F	00dd dddd	MIDI DDL2 L ch TAP func. cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 20	00dd dddd	MIDI DDL2 R ch TAP func. cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 21	00dd dddd	MIDI DDL1 HOLD func. Cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 22	00dd dddd	MIDI DDL2 HOLD func. Cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95

00 23	00dd dddd	MIDI DDL1 MOMENT func. cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 24	00dd dddd	MIDI DDL2 MOMENT func. cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 25	00dd dddd	MIDI SEND/RETURN sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 26	00dd dddd	DIRECT INPUT LEVEL cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 27	00dd dddd	FV Pedal Position cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 28	00dd dddd	MIDI DDL1 FILTER Sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 29	00dd dddd	MIDI DDL2 FILTER Sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 2A	00dd dddd	MIDI DDL1 TIMEx2 Sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 2B	00dd dddd	MIDI DDL2 TIMEx2 Sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 2C	00dd dddd	MIDI DDL1 Delay Phase Sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 2D	00dd dddd	MIDI DDL2 Delay Phase Sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 2E	00dd dddd	MIDI DDL1 Mod. Sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 2F	00dd dddd	MIDI DDL2 Mod. Sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 30	00dd dddd	MIDI DDL1 Feedback Phase Sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 31	00dd dddd	MIDI DDL2 Feedback Phase Sw cc (0 - 63) OFF, cc01 - cc31, cc64 - cc95
00 32	0000 00dd	MIDI Sync (0 - 3) INT, USB, MIDI, AUTO
00 33	0000 00dd	MIDI Realtime source (0 - 2) INT, USB, MIDI
00 34	0000 00dd	MIDI Thru (0 - 3) OFF, USB, MID, U.M

00 35	0000 00dd	USB MIDI Thru (0 - 3) OFF, USB, MID, U.M
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* PC MAP Parameters Offset Address

Offset Address	Description	
00 00	0ddd dddd	PC #1 (0 - 99) EVH1 - C.84
00 01	0ddd dddd	PC #2 (0 - 99) EVH1 - C.84
00 02	0ddd dddd	PC #3 (0 - 99) EVH1 - C.84
00 03	0ddd dddd	PC #4 (0 - 99) EVH1 - C.84
00 04	0ddd dddd	PC #5 (0 - 99) EVH1 - C.84
00 05	0ddd dddd	PC #6 (0 - 99) EVH1 - C.84
00 06	0ddd dddd	PC #7 (0 - 99) EVH1 - C.84
00 07	0ddd dddd	PC #8 (0 - 99) EVH1 - C.84
00 08	0ddd dddd	PC #9 (0 - 99) EVH1 - C.84
00 09	0ddd dddd	PC #10 (0 - 99) EVH1 - C.84
00 0A	0ddd dddd	PC #11 (0 - 99) EVH1 - C.84
00 0B	0ddd dddd	PC #12 (0 - 99) EVH1 - C.84
00 0C	0ddd dddd	PC #13 (0 - 99) EVH1 - C.84
00 0D	0ddd dddd	PC #14 (0 - 99) EVH1 - C.84
00 0E	0ddd dddd	PC #15 (0 - 99) EVH1 - C.84
00 0F	0ddd dddd	PC #16 (0 - 99) EVH1 - C.84
00 10	0ddd dddd	PC #17 (0 - 99) EVH1 - C.84
00 11	0ddd dddd	PC #18 (0 - 99) EVH1 - C.84
00 12	0ddd dddd	PC #19 (0 - 99) EVH1 - C.84
00 13	0ddd dddd	PC #20 (0 - 99) EVH1 - C.84
00 14	0ddd dddd	PC #21 (0 - 99) EVH1 - C.84
00 15	0ddd dddd	PC #22 (0 - 99) EVH1 - C.84
00 16	0ddd dddd	PC #23 (0 - 99) EVH1 - C.84

00 17	0ddd dddd	PC #24 (0 - 99) EVH1 - C.84
00 18	0ddd dddd	PC #25 (0 - 99) EVH1 - C.84
00 19	0ddd dddd	PC #26 (0 - 99) EVH1 - C.84
00 1A	0ddd dddd	PC #27 (0 - 99) EVH1 - C.84
00 1B	0ddd dddd	PC #28 (0 - 99) EVH1 - C.84
00 1C	0ddd dddd	PC #29 (0 - 99) EVH1 - C.84
00 1D	0ddd dddd	PC #30 (0 - 99) EVH1 - C.84
00 1E	0ddd dddd	PC #31 (0 - 99) EVH1 - C.84
00 1F	0ddd dddd	PC #32 (0 - 99) EVH1 - C.84
00 20	0ddd dddd	PC #33 (0 - 99) EVH1 - C.84
00 21	0ddd dddd	PC #34 (0 - 99) EVH1 - C.84
00 22	0ddd dddd	PC #35 (0 - 99) EVH1 - C.84
00 23	0ddd dddd	PC #36 (0 - 99) EVH1 - C.84
00 24	0ddd dddd	PC #37 (0 - 99) EVH1 - C.84
00 25	0ddd dddd	PC #38 (0 - 99) EVH1 - C.84
00 26	0ddd dddd	PC #39 (0 - 99) EVH1 - C.84
00 27	0ddd dddd	PC #40 (0 - 99) EVH1 - C.84
00 28	0ddd dddd	PC #41 (0 - 99) EVH1 - C.84
00 29	0ddd dddd	PC #42 (0 - 99) EVH1 - C.84
00 2A	0ddd dddd	PC #43 (0 - 99) EVH1 - C.84
00 2B	0ddd dddd	PC #44 (0 - 99) EVH1 - C.84
00 2C	0ddd dddd	PC #45 (0 - 99) EVH1 - C.84
00 2D	0ddd dddd	PC #46 (0 - 99) EVH1 - C.84
00 2E	0ddd dddd	PC #47 (0 - 99) EVH1 - C.84
00 2F	0ddd dddd	PC #48 (0 - 99) EVH1 - C.84
00 30	0ddd dddd	PC #49 (0 - 99) EVH1 - C.84

00 31	0ddd dddd	PC #50 (0 - 99) EVH1 - C.84
00 32	0ddd dddd	PC #51 (0 - 99) EVH1 - C.84
00 33	0ddd dddd	PC #52 (0 - 99) EVH1 - C.84
00 34	0ddd dddd	PC #53 (0 - 99) EVH1 - C.84
00 35	0ddd dddd	PC #54 (0 - 99) EVH1 - C.84
00 36	0ddd dddd	PC #55 (0 - 99) EVH1 - C.84
00 37	0ddd dddd	PC #56 (0 - 99) EVH1 - C.84
00 38	0ddd dddd	PC #57 (0 - 99) EVH1 - C.84
00 39	0ddd dddd	PC #58 (0 - 99) EVH1 - C.84
00 3A	0ddd dddd	PC #59 (0 - 99) EVH1 - C.84
00 3B	0ddd dddd	PC #60 (0 - 99) EVH1 - C.84
00 3C	0ddd dddd	PC #61 (0 - 99) EVH1 - C.84
00 3D	0ddd dddd	PC #62 (0 - 99) EVH1 - C.84
00 3E	0ddd dddd	PC #63 (0 - 99) EVH1 - C.84
00 3F	0ddd dddd	PC #64 (0 - 99) EVH1 - C.84
00 40	0ddd dddd	PC #65 (0 - 99) EVH1 - C.84
00 41	0ddd dddd	PC #66 (0 - 99) EVH1 - C.84
00 42	0ddd dddd	PC #67 (0 - 99) EVH1 - C.84
00 43	0ddd dddd	PC #68 (0 - 99) EVH1 - C.84
00 44	0ddd dddd	PC #69 (0 - 99) EVH1 - C.84
00 45	0ddd dddd	PC #70 (0 - 99) EVH1 - C.84
00 46	0ddd dddd	PC #71 (0 - 99) EVH1 - C.84
00 47	0ddd dddd	PC #72 (0 - 99) EVH1 - C.84
00 48	0ddd dddd	PC #73 (0 - 99) EVH1 - C.84
00 49	0ddd dddd	PC #74 (0 - 99) EVH1 - C.84

00 4A	0ddd dddd	PC #75 (0 - 99) EVH1 - C.84
00 4B	0ddd dddd	PC #76 (0 - 99) EVH1 - C.84
00 4C	0ddd dddd	PC #77 (0 - 99) EVH1 - C.84
00 4D	0ddd dddd	PC #78 (0 - 99) EVH1 - C.84
00 4E	0ddd dddd	PC #79 (0 - 99) EVH1 - C.84
00 4F	0ddd dddd	PC #80 (0 - 99) EVH1 - C.84
00 50	0ddd dddd	PC #81 (0 - 99) EVH1 - C.84
00 51	0ddd dddd	PC #82 (0 - 99) EVH1 - C.84
00 52	0ddd dddd	PC #83 (0 - 99) EVH1 - C.84
00 53	0ddd dddd	PC #84 (0 - 99) EVH1 - C.84
00 54	0ddd dddd	PC #85 (0 - 99) EVH1 - C.84
00 55	0ddd dddd	PC #86 (0 - 99) EVH1 - C.84
00 56	0ddd dddd	PC #87 (0 - 99) EVH1 - C.84
00 57	0ddd dddd	PC #88 (0 - 99) EVH1 - C.84
00 58	0ddd dddd	PC #89 (0 - 99) EVH1 - C.84
00 59	0ddd dddd	PC #90 (0 - 99) EVH1 - C.84
00 5A	0ddd dddd	PC #91 (0 - 99) EVH1 - C.84
00 5B	0ddd dddd	PC #92 (0 - 99) EVH1 - C.84
00 5C	0ddd dddd	PC #93 (0 - 99) EVH1 - C.84
00 5D	0ddd dddd	PC #94 (0 - 99) EVH1 - C.84
00 5E	0ddd dddd	PC #95 (0 - 99) EVH1 - C.84
00 5F	0ddd dddd	PC #96 (0 - 99) EVH1 - C.84
00 60	0ddd dddd	PC #97 (0 - 99) EVH1 - C.84
00 61	0ddd dddd	PC #98 (0 - 99) EVH1 - C.84
00 62	0ddd dddd	PC #99 (0 - 99) EVH1 - C.84

00 63	0ddd dddd	PC #100 (0 - 99) EVH1 - C.84
00 64	0ddd dddd	PC #101 (0 - 99) EVH1 - C.84
00 65	0ddd dddd	PC #102 (0 - 99) EVH1 - C.84
00 66	0ddd dddd	PC #103 (0 - 99) EVH1 - C.84
00 67	0ddd dddd	PC #104 (0 - 99) EVH1 - C.84
00 68	0ddd dddd	PC #105 (0 - 99) EVH1 - C.84
00 69	0ddd dddd	PC #106 (0 - 99) EVH1 - C.84
00 6A	0ddd dddd	PC #107 (0 - 99) EVH1 - C.84
00 6B	0ddd dddd	PC #108 (0 - 99) EVH1 - C.84
00 6C	0ddd dddd	PC #109 (0 - 99) EVH1 - C.84
00 6D	0ddd dddd	PC #110 (0 - 99) EVH1 - C.84
00 6E	0ddd dddd	PC #111 (0 - 99) EVH1 - C.84
00 6F	0ddd dddd	PC #112 (0 - 99) EVH1 - C.84
00 70	0ddd dddd	PC #113 (0 - 99) EVH1 - C.84
00 71	0ddd dddd	PC #114 (0 - 99) EVH1 - C.84
00 72	0ddd dddd	PC #115 (0 - 99) EVH1 - C.84
00 73	0ddd dddd	PC #116 (0 - 99) EVH1 - C.84
00 74	0ddd dddd	PC #117 (0 - 99) EVH1 - C.84
00 75	0ddd dddd	PC #118 (0 - 99) EVH1 - C.84
00 76	0ddd dddd	PC #119 (0 - 99) EVH1 - C.84
00 77	0ddd dddd	PC #120 (0 - 99) EVH1 - C.84
00 78	0ddd dddd	PC #121 (0 - 99) EVH1 - C.84
00 79	0ddd dddd	PC #122 (0 - 99) EVH1 - C.84
00 7A	0ddd dddd	PC #123 (0 - 99) EVH1 - C.84
00 7B	0ddd dddd	PC #124 (0 - 99) EVH1 - C.84

00 7C	0ddd dddd	PC #125 (0 - 99) EVH1 - C.84
00 7D	0ddd dddd	PC #126 (0 - 99) EVH1 - C.84
00 7E	0ddd dddd	PC #127 (0 - 99) EVH1 - C.84
00 7F	0ddd dddd	PC #128 (0 - 99) EVH1 - C.84

* MEMORY EFFECT Parameters Offset Address

Offset Address	Description	
00 00	0000 00dd	Structure (0 - 2) SERI, PARA1, PARA2
00 01	0000 aaaa 0000 bbbb	BPM (40 - 250)
00 03	0000 00dd	DDL1/DDL2 Mod. Link (0 - 2) NOR, INV, OFF
00 04	0000 000d	DDL1 SW (0 - 1) OFF, ON
00 05	0000 000d	DDL1 TYPE (0 - 1) STEREO, PAN
00 06	0000 00dd	DDL1 TIME LINK Sw (0 - 2) OFF, ON, OST
00 07	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	DDL1 Time L (0 - 15000):TIME x2=OFF (0 - 30000):TIME X2=ON *The value is multiplied by 10. (30001 - 30013) 16 th , 8 th triplet, dotted 16 th , 8 th , quarter triplet, dotted 8 th , quarter, half triplet, dotted quarter, half, whole triplet, dotted half, whole
00 0B	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	DDL1 Time R * Same as DDL1 Time L
00 0F	0ddd dddd	DDL1 feedback (0 - 99)
00 10	0ddd dddd	DDL1 Rate (0 - 112) 0 - 99 : value 100 - 112 : whole, dotted half, whole triplet, half, dotted quarter, half triplet, quarter, dotted 8 th , quarter triplet, 8 th , dotted 16 th , 8 th triplet, 16 th
00 11	0ddd dddd	DDL1 Depth (0 - 99)
00 12	0000 000d	DDL1 LFO type (0 - 1) TRI, SIN
00 13	0000 000d	DDL1 MOD LFO Phase (0 - 1) NOR, INV

00 14	000d dddd	DDL1 Feedback eq low cut Frequency (0 - 17) FLAT, 20, 25, 31.5, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800
00 15	0000 dddd	DDL1 Feedback eq high cut Frequency (0 - 14) 630, 800, 1000, 1.25K, 1.6K, 2K, 2.5K, 3.15K, 4K, 5K, 6.3K, 8K, 10K, 12.5K, FLAT
00 16	000d dddd	DDL1 Feedback eq high cut Gain (0 - 24) -24 - 0
00 17	0000 000d	DDL1 Time x2 Sw (0 - 1) OFF, ON
00 18	0000 000d	DDL1 Filter Sw (0 - 1) OFF, ON
00 19	0000 000d	DDL1 Delay Phase Sw (0 - 1) OFF, ON
00 1A	0000 000d	DDL1 Modulation Sw (0 - 1) OFF, ON
00 1B	0000 000d	DDL1 Feedback phase Sw (0 - 1) OFF, ON
00 1C	0000 00dd	DDL1 Feedback EQ type (0 - 2) OFF, ORG, USR
00 1D	0000 000d	DDL2 SW (0 - 1) OFF, ON
00 1E	0000 000d	DDL2 TYPE (0 - 1) STEREO, PAN
00 1F	0000 00dd	DDL1 TIME LINK Sw (0 - 2) OFF, ON, OST
00 20	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	DDL2 Time L (0 - 15000):TIME x2=OFF (0 - 30000):TIME X2=ON *The value is multiplied by 10. (30001 - 30013) 16 th , 8 th triplet, dotted 16 th , 8 th , quarter triplet, dotted 8 th , quarter, half triplet, dotted quarter, half, whole triplet, dotted half, whole
00 24	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	DDL2 Time R * Same as DDL2 Time L.
00 28	0ddd dddd	DDL2 feedback (0 - 99)
00 29	0ddd dddd	DDL2 Rate (0 - 112) * Same as DDL1 Rate
00 2A	0ddd dddd	DDL2 Depth (0 - 99)
00 2B	0000 000d	DDL2 LFO type (0 - 1) TRI, SIN
00 2C	0000 000d	DDL2 MOD LFO Phase (0 - 1) NOR, INV

00 2D	000d dddd	DDL2 Feedback eq low cut Frequency (0 - 17) FLAT, 20, 25, 31.5, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800
00 2E	0000 dddd	DDL2 Feedback eq high cut Frequency (0 - 14) 630, 800, 1000, 1.25K, 1.6K, 2K, 2.5K, 3.15K, 4K, 5K, 6.3K, 8K, 10K, 12.5K, FLAT
00 2F	000d dddd	DDL2 Feedback eq high cut Gain (0 - 24) -24 - 0
00 30	0000 000d	DDL2 Time x2 Sw (0 - 1) OFF, ON
00 31	0000 000d	DDL2 Filter Sw (0 - 1) OFF, ON
00 32	0000 000d	DDL2 Filter Sw (0 - 1) OFF, ON
00 33	0000 000d	DDL2 Filter Sw (0 - 1) OFF, ON
00 34	0000 000d	DDL2 Filter Sw (0 - 1) OFF, ON
00 35	0000 00dd	DDL2 Filter Type (0 - 2) OFF, ORG, USR
00 36	0ddd dddd	DDL1 Output Level (0 - 99)
00 37	0ddd dddd	DDL2 Output Level (0 - 99)
00 38	0ddd dddd	Direct Level (0 - 100)
00 39	0000 000d	TEMPO hold SW (0 - 1) OFF, ON
00 3A	000d dddd	Output gain (0 - 24) -12 - 12
00 3B	0000 000d	DDL1 Carryover Sw (0 - 1) OFF, ON
00 3C	0000 000d	DDL2 Carryover Sw (0 - 1) OFF, ON
00 3D	0000 000d	Foot Volume SW (0 - 1) OFF, ON
00 3E	0ddd dddd	Pedal position (0 - 100)
00 3F	0ddd dddd	FV min (0 - 100)
00 40	0ddd dddd	FV max (0 - 100)
00 41	0000 00dd	FV curve (0 - 3) SLOW1, SLOW2, NORMAL, FAST
00 42	0000 000d	Send/Return SW (0 - 1) OFF, ON
00 43	0ddd dddd	Return Level (0 - 100)
00 44	0000 000d	Noise suppressor SW (0 - 1) OFF, ON
00 45	0ddd dddd	Noise suppressor threshold (0 - 100)
00 46	0ddd dddd	Noise suppressor release (0 - 100)
00 47	0000 aaaa 0000 bbbb	DDL1 Time offset (0 - 198) Offset:99 -99 - 99
00 49	0000 aaaa 0000 bbbb	DDL2 Time offset (0 - 198) Offset:99 -99 - 99

* MEMORY CTL parameters Offset Address

Offset Address	Description	
00 00	000d dddd	TAP/CTL1 Function (0 - 19) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET
00 01	000d dddd	CTL2 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 02	000d dddd	CTL3 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 03	000d dddd	CTL4 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 04	000d dddd	CTL5 Function (0 - 20) OFF, BPM.TAP, D1.2.TAP, D1.L.TAP, D1.R.TAP, D2.L.TAP, D2.R.TAP, D1.2.SW, D1.SW, D2.SW, D1.2.HLD, D1.HOLD, D2.HOLD, D1.2.MOM, D1.MOM, D2.MOM, BYPASS, MEM.UP, MEM.DN, SND.RET, MEM.NUM
00 05	0000 dddd	EXP1 Function (0 - 14) OFF, FV, D1.TIM.L, D1.TIM.R, D2.TIM.L, D2.TIM.R, D1.FBK, D2.FBK, D1.OUT, D2.OUT, D1.M.RAT, D2.M.RAT, D1.M.DPT, D2.M.DPT, DIR.LVL
00 06	0000 dddd	EXP2 Function (0 - 14) OFF, FV, D1.TIM.L, D1.TIM.R, D2.TIM.L, D2.TIM.R, D1.FBK, D2.FBK, D1.OUT, D2.OUT, D1.M.RAT, D2.M.RAT, D1.M.DPT, D2.M.DPT, DIR.LVL

00 07	0000 000d	TAP/CTL1 Mode (0 - 1) TOGGLE, MOMENT
00 08	0000 000d	CTL2 Mode (0 - 1) TOGGLE, MOMENT
00 09	0000 000d	CTL3 Mode (0 - 1) TOGGLE, MOMENT
00 0A	0000 000d	CTL4 Mode (0 - 1) TOGGLE, MOMENT
00 0B	0000 000d	CTL5 Mode (0 - 1) TOGGLE, MOMENT
00 0C	0ddd dddd	CTL2 Memory number (0 - 99) EVH1 - C.84
00 0D	0ddd dddd	CTL3 Memory number (0 - 99) EVH1 - C.84
00 0E	0ddd dddd	CTL4 Memory number (0 - 99) EVH1 - C.84
00 0F	0ddd dddd	CTL5 Memory number (0 - 99) EVH1 - C.84
00 10	0ddd dddd	TAP/CTL1 DDL1 Hold Level (0 - 120)
00 11	0ddd dddd	TAP/CTL1 DDL2 Hold Level (0 - 120)
00 12	0ddd dddd	CTL2 DDL1 Hold Level (0 - 120)
00 13	0ddd dddd	CTL2 DDL2 Hold Level (0 - 120)
00 14	0ddd dddd	CTL3 DDL1 Hold Level (0 - 120)
00 15	0ddd dddd	CTL3 DDL2 Hold Level (0 - 120)
00 16	0ddd dddd	CTL4 DDL1 Hold Level (0 - 120)
00 17	0ddd dddd	CTL4 DDL2 Hold Level (0 - 120)
00 18	0ddd dddd	CTL5 DDL1 Hold Level (0 - 120)
00 19	0ddd dddd	CTL5 DDL2 Hold Level (0 - 120)
00 1A	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	EXP1 Target min *The value depends on the function.
00 1E	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	EXP1 Target max *The value depends on the function.
00 22	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	EXP2 Target min *The value depends on the function.
00 26	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	EXP2 Target max *The value depends on the function.

* MEMORY ASSIGN parameters Offset Address

Offset Address	Description
00 00	0000 000d ASSIGN 1 SW (0 - 1) OFF, ON

00 01	0ddd dddd	ASSIGN 1 Source (0 - 79) CTL1, CTL2, CTL3, CTL4, CTL5, EXP1, EXP2, GAFC.1, GAFC.2, GAFC.3, GAFC.4, GAFC.P, GAFC.E, GAFC.E1, GAFC.E2, GAFC.S1, GAFC.S2, cc01 - cc31, cc64 - cc95
00 02	0000 000d	ASSIGN1 Mode (0 - 1) TOGGLE, MOMENT
00 03	000d dddd	ASSIGN1 Target (0 - 21) D1.SW, D1.TIM.L, D1.TIM.R, D1.FBK, D1.OUT, D1.RATE, D1.DEPT, D1.MOD, D1.FB.PH, D2.SW, D2.TIM.L, D2.TIM.R, D2.FBK, D2.OUT, D2.RATE, D2.DEPT, D2.MOD, D2.FB.PH, DIR.LEV, SN.RT.SW, F.VOL.SW, PDL.POS
00 04	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN1 Target minimum *The value depends on the target.
00 08	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN1 Target maximum *The value depends on the target.
00 0C	0ddd dddd	ASSIGN1 Act. Lo (0 - 126)
00 0D	0ddd dddd	ASSIGN1 Act. Hi (1 - 127)
00 0E	0000 000d	ASSIGN2 SW (0 - 1) OFF, ON
00 0F	0ddd dddd	ASSIGN2 Source (0 - 79) * Same as ASSIGN1
00 10	0000 000d	ASSIGN2 Mode (0 - 1) TOGGLE, MOMENT
00 11	000d dddd	ASSIGN2 Target (0 - 21) * Same as ASSIGN1
00 12	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN2 Target minimum * Same as ASSIGN1
00 16	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN2 Target maximum * Same as ASSIGN1
00 1A	0ddd dddd	ASSIGN2 Act. Lo (0 - 126)
00 1B	0ddd dddd	ASSIGN2 Act. Hi (1 - 127)
00 1C	0000 000d	ASSIGN3 SW (0 - 1) OFF, ON
00 1D	0ddd dddd	ASSIGN3 Source (0 - 79) * Same as ASSIGN1
00 1E	0000 000d	ASSIGN3 Mode (0 - 1) TOGGLE, MOMENT
00 1F	000d dddd	ASSIGN3 Target (0 - 21) * Same as ASSIGN1
00 20	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN3 Target minimum * Same as ASSIGN1
00 24	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN3 Target maximum * Same as ASSIGN1
00 28	0ddd dddd	ASSIGN3 Act. Lo (0 - 126)

00 29	0ddd dddd	ASSIGN3 Act. Hi (1 - 127)
00 2A	0000 000d	ASSIGN4 SW (0 - 1) OFF, ON
00 2B	0ddd dddd	ASSIGN4 Source (0 - 79) * Same as ASSIGN1
00 2C	0000 000d	ASSIGN4 Mode (0 - 1) TOGGLE, MOMENT
00 2D	000d dddd	ASSIGN4 Target (0 - 21) * Same as ASSIGN1
00 2E	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN4 Target minimum * Same as ASSIGN1
00 32	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN4 Target maximum * Same as ASSIGN1
00 36	0ddd dddd	ASSIGN4 Act. Lo (0 - 126)
00 37	0ddd dddd	ASSIGN4 Act. Hi (1 - 127)
00 38	0000 000d	ASSIGN5 SW (0 - 1) OFF, ON
00 39	0ddd dddd	ASSIGN5 Source (0 - 79) * Same as ASSIGN1
00 3A	0000 000d	ASSIGN5 Mode (0 - 1) TOGGLE, MOMENT
00 3B	000d dddd	ASSIGN5 Target (0 - 21) * Same as ASSIGN1
00 3C	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN5 minimum * Same as ASSIGN1
00 40	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN5 maximum * Same as ASSIGN1
00 44	0ddd dddd	ASSIGN5 Act. Lo (0 - 126)
00 45	0ddd dddd	ASSIGN5 Act. Hi (1 - 127)
00 46	0000 000d	ASSIGN6 SW (0 - 1) OFF, ON
00 47	0ddd dddd	ASSIGN6 Source (0 - 79) * Same as ASSIGN1
00 48	0000 000d	ASSIGN6 Mode (0 - 1) TOGGLE, MOMENT
00 49	000d dddd	ASSIGN6 Target (0 - 21) * Same as ASSIGN1
00 4A	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN6 Target minimum * Same as ASSIGN1

00 4E	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN6 Target maximum * Same as ASSIGN1
00 52	0ddd dddd	ASSIGN6 Act. Lo (0 - 126)
00 53	0ddd dddd	ASSIGN6 Act. Hi (1 - 127)
00 54	0000 000d	ASSIGN7 SW (0 - 1) OFF, ON
00 55	0ddd dddd	ASSIGN7 Source (0 - 79) * Same as ASSIGN1
00 56	0000 000d	ASSIGN7 Mode (0 - 1) TOGGLE, MOMENT
00 57	000d dddd	ASSIGN7 Target (0 - 21) * Same as ASSIGN1
00 58	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN7 minimum * Same as ASSIGN1
00 5C	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN7 maximum * Same as ASSIGN1
00 60	0ddd dddd	ASSIGN7 Act. Lo (0 - 126)
00 61	0ddd dddd	ASSIGN7 Act. Hi (1 - 127)
00 62	0000 000d	ASSIGN8 SW (0 - 1) OFF, ON
00 63	0ddd dddd	ASSIGN8 Source (0 - 79) * Same as ASSIGN1
00 64	0000 000d	ASSIGN8 Mode (0 - 1) TOGGLE, MOMENT
00 65	000d dddd	ASSIGN8 Target (0 - 21) * Same as ASSIGN1
00 66	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN8 Target minimum * Same as ASSIGN1
00 6A	0000 0aaa 0000 bbbb 0000 cccc 0000 dddd	ASSIGN8 Target maximum * Same as ASSIGN1
00 6E	0ddd dddd	ASSIGN8 Act. Lo (0 - 126)
00 6F	0ddd dddd	ASSIGN8 Act. Hi (1 - 127)

Table of Correspondence between
Delay time and MIDI CC value

TIME X2 = OFF

Time (ms)	CC value	
	MSB	LSB
0.0	00H	00H
0.1	01H	00H
0.2	01H	01H
0.2	01H	01H
0.3	01H	03H
0.4	01H	04H
0.5	01H	05H
0.6	01H	06H
0.7	01H	08H
0.8	01H	09H
0.9	01H	0AH
1.0	01H	0CH
1.1	01H	0DH
1.2	01H	0EH
1.3	01H	10H
1.4	01H	11H
1.5	01H	12H
1.6	01H	13H
1.7	01H	15H
1.8	01H	16H
1.9	01H	17H
2.0	01H	19H
2.1	01H	1AH
2.2	01H	1BH
2.3	01H	1DH
2.4	01H	1EH
2.5	01H	1FH
2.6	01H	20H
2.7	01H	22H
2.8	01H	23H
2.9	01H	24H
3.0	01H	26H
3.1	01H	27H
3.2	01H	28H
3.3	01H	29H
3.4	01H	2BH
3.5	01H	2CH
3.6	01H	2DH
3.7	01H	2FH

3.8	01H	30H
3.9	01H	31H
4.0	01H	33H
4.1	01H	34H
4.2	01H	35H
4.3	01H	36H
4.4	01H	38H
4.5	01H	39H
4.6	01H	3AH
4.7	01H	3CH
4.8	01H	3DH
4.9	01H	3EH
5.0	01H	40H
5.1	01H	41H
5.2	01H	42H
5.3	01H	43H
5.4	01H	45H
5.5	01H	46H
5.6	01H	47H
5.7	01H	49H
5.8	01H	4AH
5.9	01H	4BH
6.0	01H	4CH
6.1	01H	4EH
6.2	01H	4FH
6.3	01H	50H
6.4	01H	52H
6.5	01H	53H
6.6	01H	54H
6.7	01H	56H
6.8	01H	57H
6.9	01H	58H
7.0	01H	59H
7.1	01H	5BH
7.2	01H	5CH
7.3	01H	5DH
7.4	01H	5FH
7.5	01H	60H
7.6	01H	61H
7.7	01H	62H
7.8	01H	64H
7.9	01H	65H
8.0	01H	66H

8.1	01H	68H
8.2	01H	69H
8.3	01H	6AH
8.4	01H	6CH
8.5	01H	6DH
8.6	01H	6EH
8.7	01H	6FH
8.8	01H	71H
8.9	01H	72H
9.0	01H	73H
9.1	01H	75H
9.2	01H	76H
9.3	01H	77H
9.4	01H	79H
9.5	01H	7AH
9.6	01H	7BH
9.7	01H	7CH
9.8	01H	7EH
9.9	01H	7FH
10	02H	00H
11	02H	0BH
12	02H	15H
13	02H	20H
14	02H	2BH
15	00H	00H
16	02H	40H
17	02H	4BH
18	02H	55H
19	02H	60H
20	02H	6BH
21	02H	75H
22	03H	00H
23	03H	0BH
24	03H	15H
25	00H	00H
26	03H	2BH
27	03H	35H
28	03H	40H
29	03H	4BH
30	03H	55H
31	03H	60H
32	03H	6BH
33	03H	75H

34	04H	00H
35	04H	0BH
36	04H	15H
37	04H	20H
38	04H	2BH
39	04H	35H
40	04H	40H
41	04H	4BH
42	04H	55H
43	04H	60H
44	04H	6BH
45	04H	75H
46	05H	00H
47	05H	0BH
48	05H	15H
49	05H	20H
50	05H	2BH
51	05H	35H
52	05H	40H
53	05H	4BH
54	05H	55H
55	05H	60H
56	05H	6BH
57	05H	75H
58	06H	00H
59	06H	0BH
60	06H	15H
61	06H	20H
62	06H	2BH
63	06H	35H
64	06H	40H
65	06H	4BH
66	06H	55H
67	06H	60H
68	06H	6BH
69	06H	75H
70	07H	00H
71	07H	0BH
72	07H	15H
73	07H	20H
74	07H	2BH
75	07H	35H
76	07H	40H

77	07H	4BH
78	07H	55H
79	07H	60H
80	07H	6AH
81	07H	75H
82	08H	00H
83	08H	0AH
84	08H	15H
85	08H	20H
86	08H	2AH
87	08H	35H
88	08H	40H
89	08H	4AH
90	08H	55H
91	08H	60H
92	08H	6AH
93	08H	75H
94	09H	00H
95	09H	0AH
96	09H	15H
97	09H	20H
98	09H	2AH
99	09H	35H
100	09H	40H
101	09H	4AH
102	09H	55H
103	09H	60H
104	09H	6AH
105	09H	75H
106	0AH	00H
107	0AH	0AH
108	0AH	15H
109	0AH	20H
110	0AH	2AH
111	0AH	35H
112	0AH	40H
113	0AH	4AH
114	0AH	55H
115	0AH	60H
116	0AH	6AH
117	0AH	75H
118	0BH	00H
119	0BH	0AH

120	0BH	15H
121	0BH	20H
122	0BH	2AH
123	0BH	35H
124	0BH	40H
125	0BH	4AH
126	0BH	55H
127	0BH	60H
128	0BH	6AH
129	0BH	75H
130	0CH	00H
131	0CH	0AH
132	0CH	15H
133	0CH	20H
134	0CH	2AH
135	0CH	35H
136	0CH	40H
137	0CH	4AH
138	0CH	55H
139	0CH	60H
140	0CH	6AH
141	0CH	75H
142	0DH	00H
143	0DH	0AH
144	0DH	15H
145	0DH	20H
146	0DH	2AH
147	0DH	35H
148	0DH	40H
149	0DH	4AH
150	0DH	55H
151	0DH	60H
152	0DH	6AH
153	0DH	75H
154	0EH	00H
155	0EH	0AH
156	0EH	15H
157	0EH	20H
158	0EH	2AH
159	0EH	35H
160	0EH	40H
161	0EH	4AH
162	0EH	55H

163	0EH	60H
164	0EH	6AH
165	0EH	75H
166	0FH	00H
167	0FH	0AH
168	0FH	15H
169	0FH	20H
170	0FH	2AH
171	0FH	35H
172	0FH	40H
173	0FH	4AH
174	0FH	55H
175	0FH	60H
176	0FH	6AH
177	0FH	75H
178	10H	00H
179	10H	0AH
180	10H	15H
181	10H	20H
182	10H	2AH
183	10H	35H
184	10H	40H
185	10H	4AH
186	10H	55H
187	10H	60H
188	10H	6AH
189	10H	75H
190	11H	00H
191	11H	0AH
192	11H	15H
193	11H	20H
194	11H	2AH
195	11H	35H
196	11H	40H
197	11H	4AH
198	11H	55H
199	11H	60H
200	11H	6AH
201	11H	75H
202	12H	00H
203	12H	0AH
204	12H	15H
205	12H	20H

206	12H	2AH
207	12H	35H
208	12H	40H
209	12H	4AH
210	12H	55H
211	12H	60H
212	12H	6AH
213	12H	75H
214	12H	7FH
215	13H	0AH
216	13H	15H
217	13H	1FH
218	13H	2AH
219	13H	35H
220	13H	3FH
221	13H	4AH
222	13H	55H
223	13H	5FH
224	13H	6AH
225	13H	75H
226	13H	7FH
227	14H	0AH
228	14H	15H
229	14H	1FH
230	14H	2AH
231	14H	35H
232	14H	3FH
233	14H	4AH
234	14H	55H
235	14H	5FH
236	14H	6AH
237	14H	75H
238	14H	7FH
239	15H	0AH
240	15H	15H
241	15H	1FH
242	15H	2AH
243	15H	35H
244	15H	3FH
245	15H	4AH
246	15H	55H
247	15H	5FH
248	15H	6AH

249	15H	75H
250	15H	7FH
251	16H	0AH
252	16H	15H
253	16H	1FH
254	16H	2AH
255	16H	35H
256	16H	3FH
257	16H	4AH
258	16H	55H
259	16H	5FH
260	16H	6AH
261	16H	75H
262	16H	7FH
263	17H	0AH
264	17H	15H
265	17H	1FH
266	17H	2AH
267	17H	35H
268	17H	3FH
269	17H	4AH
270	17H	55H
271	17H	5FH
272	17H	6AH
273	17H	75H
274	17H	7FH
275	18H	0AH
276	18H	15H
277	18H	1FH
278	18H	2AH
279	18H	35H
280	18H	3FH
281	18H	4AH
282	18H	55H
283	18H	5FH
284	18H	6AH
285	18H	75H
286	18H	7FH
287	19H	0AH
288	19H	15H
289	19H	1FH
290	19H	2AH
291	19H	35H

292	19H	3FH
293	19H	4AH
294	19H	55H
295	19H	5FH
296	19H	6AH
297	19H	75H
298	19H	7FH
299	1AH	0AH
300	1AH	15H
301	1AH	1FH
302	1AH	2AH
303	1AH	35H
304	1AH	3FH
305	1AH	4AH
306	1AH	55H
307	1AH	5FH
308	1AH	6AH
309	1AH	75H
310	1AH	7FH
311	1BH	0AH
312	1BH	15H
313	1BH	1FH
314	1BH	2AH
315	1BH	35H
316	1BH	3FH
317	1BH	4AH
318	1BH	55H
319	1BH	5FH
320	1BH	6AH
321	1BH	75H
322	1BH	7FH
323	1CH	0AH
324	1CH	15H
325	1CH	1FH
326	1CH	2AH
327	1CH	35H
328	1CH	3FH
329	1CH	4AH
330	1CH	55H
331	1CH	5FH
332	1CH	6AH
333	1CH	75H
334	1CH	7FH

335	1DH	0AH
336	1DH	15H
337	1DH	1FH
338	1DH	2AH
339	1DH	35H
340	1DH	3FH
341	1DH	4AH
342	1DH	55H
343	1DH	5FH
344	1DH	6AH
345	1DH	75H
346	1DH	7FH
347	1EH	0AH
348	1EH	15H
349	1EH	1FH
350	1EH	2AH
351	1EH	34H
352	1EH	3FH
353	1EH	4AH
354	1EH	54H
355	1EH	5FH
356	1EH	6AH
357	1EH	74H
358	1EH	7FH
359	1FH	0AH
360	1FH	14H
361	1FH	1FH
362	1FH	2AH
363	1FH	34H
364	1FH	3FH
365	1FH	4AH
366	1FH	54H
367	1FH	5FH
368	1FH	6AH
369	1FH	74H
370	1FH	7FH
371	20H	0AH
372	20H	14H
373	20H	1FH
374	20H	2AH
375	20H	34H
376	20H	3FH
377	20H	4AH

378	20H	54H
379	20H	5FH
380	20H	6AH
381	20H	74H
382	20H	7FH
383	21H	0AH
384	21H	14H
385	21H	1FH
386	21H	2AH
387	21H	34H
388	21H	3FH
389	21H	4AH
390	21H	54H
391	21H	5FH
392	21H	6AH
393	21H	74H
394	21H	7FH
395	22H	0AH
396	22H	14H
397	22H	1FH
398	22H	2AH
399	22H	34H
400	22H	3FH
401	22H	4AH
402	22H	54H
403	22H	5FH
404	22H	6AH
405	22H	74H
406	22H	7FH
407	23H	0AH
408	23H	14H
409	23H	1FH
410	23H	2AH
411	23H	34H
412	23H	3FH
413	23H	4AH
414	23H	54H
415	23H	5FH
416	23H	6AH
417	23H	74H
418	23H	7FH
419	24H	0AH
420	24H	14H

421	24H	1FH
422	24H	2AH
423	24H	34H
424	24H	3FH
425	24H	4AH
426	24H	54H
427	24H	5FH
428	24H	6AH
429	24H	74H
430	24H	7FH
431	25H	0AH
432	25H	14H
433	25H	1FH
434	25H	2AH
435	25H	34H
436	25H	3FH
437	25H	4AH
438	25H	54H
439	25H	5FH
440	25H	6AH
441	25H	74H
442	25H	7FH
443	26H	0AH
444	26H	14H
445	26H	1FH
446	26H	2AH
447	26H	34H
448	26H	3FH
449	26H	4AH
450	26H	54H
451	26H	5FH
452	26H	6AH
453	26H	74H
454	26H	7FH
455	27H	0AH
456	27H	14H
457	27H	1FH
458	27H	2AH
459	27H	34H
460	27H	3FH
461	27H	4AH
462	27H	54H
463	27H	5FH

464	27H	6AH
465	27H	74H
466	27H	7FH
467	28H	0AH
468	28H	14H
469	28H	1FH
470	28H	2AH
471	28H	34H
472	28H	3FH
473	28H	4AH
474	28H	54H
475	28H	5FH
476	28H	6AH
477	28H	74H
478	28H	7FH
479	29H	0AH
480	29H	14H
481	29H	1FH
482	29H	2AH
483	29H	34H
484	29H	3FH
485	29H	49H
486	29H	54H
487	29H	5FH
488	29H	69H
489	29H	74H
490	29H	7FH
491	2AH	09H
492	2AH	14H
493	2AH	1FH
494	2AH	29H
495	2AH	34H
496	2AH	3FH
497	2AH	49H
498	2AH	54H
499	2AH	5FH
500	2AH	69H
501	2AH	74H
502	2AH	7FH
503	2BH	09H
504	2BH	14H
505	2BH	1FH
506	2BH	29H

507	2BH	34H
508	2BH	3FH
509	2BH	49H
510	2BH	54H
511	2BH	5FH
512	2BH	69H
513	2BH	74H
514	2BH	7FH
515	2CH	09H
516	2CH	14H
517	2CH	1FH
518	2CH	29H
519	2CH	34H
520	2CH	3FH
521	2CH	49H
522	2CH	54H
523	2CH	5FH
524	2CH	69H
525	2CH	74H
526	2CH	7FH
527	2DH	09H
528	2DH	14H
529	2DH	1FH
530	2DH	29H
531	2DH	34H
532	2DH	3FH
533	2DH	49H
534	2DH	54H
535	2DH	5FH
536	2DH	69H
537	2DH	74H
538	2DH	7FH
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548	2EH	69H
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552	2FH	14H
553	2FH	1FH
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559	2FH	5FH
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568	30H	3FH
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571	30H	5FH
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574	30H	7FH
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576	31H	14H
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581	31H	49H
582	31H	54H
583	31H	5FH
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586	31H	7FH
587	32H	09H
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612	34H	14H
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634	35H	7EH
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644	36H	69H
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693	3AH	74H
694	3AH	7EH
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699	3BH	34H
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703	3BH	5EH
704	3BH	69H
705	3BH	74H
706	3BH	7EH
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711	3CH	34H
712	3CH	3EH
713	3CH	49H
714	3CH	54H
715	3CH	5EH
716	3CH	69H
717	3CH	74H
718	3CH	7EH
719	3DH	09H
720	3DH	14H
721	3DH	1EH

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723	3DH	34H
724	3DH	3EH
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726	3DH	54H
727	3DH	5EH
728	3DH	69H
729	3DH	74H
730	3DH	7EH
731	3EH	09H
732	3EH	14H
733	3EH	1EH
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735	3EH	34H
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741	3EH	74H
742	3EH	7EH
743	3FH	09H
744	3FH	14H
745	3FH	1EH
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747	3FH	34H
748	3FH	3EH
749	3FH	49H
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752	3FH	69H
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754	3FH	7EH
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757	40H	1EH
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759	40H	33H
760	40H	3EH
761	40H	49H
762	40H	53H
763	40H	5EH
764	40H	69H

765	40H	73H
766	40H	7EH
767	41H	09H
768	41H	13H
769	41H	1EH
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771	41H	33H
772	41H	3EH
773	41H	49H
774	41H	53H
775	41H	5EH
776	41H	69H
777	41H	73H
778	41H	7EH
779	42H	09H
780	42H	13H
781	42H	1EH
782	42H	29H
783	42H	33H
784	42H	3EH
785	42H	49H
786	42H	53H
787	42H	5EH
788	42H	69H
789	42H	73H
790	42H	7EH
791	43H	09H
792	43H	13H
793	43H	1EH
794	43H	29H
795	43H	33H
796	43H	3EH
797	43H	49H
798	43H	53H
799	43H	5EH
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801	43H	73H
802	43H	7EH
803	44H	09H
804	44H	13H
805	44H	1EH
806	44H	29H
807	44H	33H

808	44H	3EH
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810	44H	53H
811	44H	5EH
812	44H	69H
813	44H	73H
814	44H	7EH
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816	45H	13H
817	45H	1EH
818	45H	29H
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821	45H	49H
822	45H	53H
823	45H	5EH
824	45H	69H
825	45H	73H
826	45H	7EH
827	46H	09H
828	46H	13H
829	46H	1EH
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831	46H	33H
832	46H	3EH
833	46H	49H
834	46H	53H
835	46H	5EH
836	46H	69H
837	46H	73H
838	46H	7EH
839	47H	09H
840	47H	13H
841	47H	1EH
842	47H	29H
843	47H	33H
844	47H	3EH
845	47H	49H
846	47H	53H
847	47H	5EH
848	47H	69H
849	47H	73H
850	47H	7EH

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854	48H	29H
855	48H	33H
856	48H	3EH
857	48H	49H
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859	48H	5EH
860	48H	69H
861	48H	73H
862	48H	7EH
863	49H	09H
864	49H	13H
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868	49H	3EH
869	49H	49H
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871	49H	5EH
872	49H	69H
873	49H	73H
874	49H	7EH
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883	4AH	5EH
884	4AH	69H
885	4AH	73H
886	4AH	7EH
887	4BH	09H
888	4BH	13H
889	4BH	1EH
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892	4BH	3EH
893	4BH	48H

894	4BH	53H
895	4BH	5EH
896	4BH	68H
897	4BH	73H
898	4BH	7EH
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907	4CH	5EH
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909	4CH	73H
910	4CH	7EH
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912	4DH	13H
913	4DH	1EH
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922	4DH	7EH
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931	4EH	5EH
932	4EH	68H
933	4EH	73H
934	4EH	7EH
935	4FH	08H
936	4FH	13H

937	4FH	1EH
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943	4FH	5EH
944	4FH	68H
945	4FH	73H
946	4FH	7EH
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948	50H	13H
949	50H	1EH
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951	50H	33H
952	50H	3EH
953	50H	48H
954	50H	53H
955	50H	5EH
956	50H	68H
957	50H	73H
958	50H	7EH
959	51H	08H
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963	51H	33H
964	51H	3EH
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966	51H	53H
967	51H	5EH
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969	51H	73H
970	51H	7EH
971	52H	08H
972	52H	13H
973	52H	1EH
974	52H	28H
975	52H	33H
976	52H	3EH
977	52H	48H
978	52H	53H
979	52H	5EH

980	52H	68H
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982	52H	7EH
983	53H	08H
984	53H	13H
985	53H	1EH
986	53H	28H
987	53H	33H
988	53H	3EH
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1012	55H	3EH
1013	55H	48H
1014	55H	53H
1015	55H	5EH
1016	55H	68H
1017	55H	73H
1018	55H	7EH
1019	56H	08H
1020	56H	13H
1021	56H	1EH
1022	56H	28H

1023	56H	33H
1024	56H	3EH
1025	56H	48H
1026	56H	53H
1027	56H	5DH
1028	56H	68H
1029	56H	73H
1030	56H	7DH
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1032	57H	13H
1033	57H	1DH
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1035	57H	33H
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1037	57H	48H
1038	57H	53H
1039	57H	5DH
1040	57H	68H
1041	57H	73H
1042	57H	7DH
1043	58H	08H
1044	58H	13H
1045	58H	1DH
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1051	58H	5DH
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1054	58H	7DH
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1056	59H	13H
1057	59H	1DH
1058	59H	28H
1059	59H	33H
1060	59H	3DH
1061	59H	48H
1062	59H	53H
1063	59H	5DH
1064	59H	68H
1065	59H	73H

1066	59H	7DH
1067	5AH	08H
1068	5AH	13H
1069	5AH	1DH
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1071	5AH	33H
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1073	5AH	48H
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1075	5AH	5DH
1076	5AH	68H
1077	5AH	73H
1078	5AH	7DH
1079	5BH	08H
1080	5BH	13H
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1083	5BH	33H
1084	5BH	3DH
1085	5BH	48H
1086	5BH	53H
1087	5BH	5DH
1088	5BH	68H
1089	5BH	73H
1090	5BH	7DH
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1093	5CH	1DH
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1095	5CH	33H
1096	5CH	3DH
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1098	5CH	53H
1099	5CH	5DH
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1102	5CH	7DH
1103	5DH	08H
1104	5DH	13H
1105	5DH	1DH
1106	5DH	28H
1107	5DH	33H
1108	5DH	3DH

1109	5DH	48H
1110	5DH	53H
1111	5DH	5DH
1112	5DH	68H
1113	5DH	73H
1114	5DH	7DH
1115	5EH	08H
1116	5EH	13H
1117	5EH	1DH
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1119	5EH	33H
1120	5EH	3DH
1121	5EH	48H
1122	5EH	53H
1123	5EH	5DH
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1125	5EH	73H
1126	5EH	7DH
1127	5FH	08H
1128	5FH	13H
1129	5FH	1DH
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1135	5FH	5DH
1136	5FH	68H
1137	5FH	73H
1138	5FH	7DH
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1140	60H	13H
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1142	60H	28H
1143	60H	33H
1144	60H	3DH
1145	60H	48H
1146	60H	53H
1147	60H	5DH
1148	60H	68H
1149	60H	73H
1150	60H	7DH
1151	61H	08H

1152	61H	13H
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1154	61H	28H
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1156	61H	3DH
1157	61H	48H
1158	61H	53H
1159	61H	5DH
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1188	64H	12H
1189	64H	1DH
1190	64H	28H
1191	64H	32H
1192	64H	3DH
1193	64H	48H
1194	64H	52H

1195	64H	5DH
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1197	64H	72H
1198	64H	7DH
1199	65H	08H
1200	65H	12H
1201	65H	1DH
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1203	65H	32H
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1205	65H	48H
1206	65H	52H
1207	65H	5DH
1208	65H	68H
1209	65H	72H
1210	65H	7DH
1211	66H	08H
1212	66H	12H
1213	66H	1DH
1214	66H	28H
1215	66H	32H
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1218	66H	52H
1219	66H	5DH
1220	66H	68H
1221	66H	72H
1222	66H	7DH
1223	67H	08H
1224	67H	12H
1225	67H	1DH
1226	67H	28H
1227	67H	32H
1228	67H	3DH
1229	67H	48H
1230	67H	52H
1231	67H	5DH
1232	67H	68H
1233	67H	72H
1234	67H	7DH
1235	68H	08H
1236	68H	12H
1237	68H	1DH

1238	68H	28H
1239	68H	32H
1240	68H	3DH
1241	68H	48H
1242	68H	52H
1243	68H	5DH
1244	68H	68H
1245	68H	72H
1246	68H	7DH
1247	69H	08H
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1251	69H	32H
1252	69H	3DH
1253	69H	48H
1254	69H	52H
1255	69H	5DH
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1257	69H	72H
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1273	6BH	1DH
1274	6BH	28H
1275	6BH	32H
1276	6BH	3DH
1277	6BH	48H
1278	6BH	52H
1279	6BH	5DH
1280	6BH	68H

1281	6BH	72H
1282	6BH	7DH
1283	6CH	08H
1284	6CH	12H
1285	6CH	1DH
1286	6CH	28H
1287	6CH	32H
1288	6CH	3DH
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1290	6CH	52H
1291	6CH	5DH
1292	6CH	68H
1293	6CH	72H
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1295	6DH	08H
1296	6DH	12H
1297	6DH	1DH
1298	6DH	27H
1299	6DH	32H
1300	6DH	3DH
1301	6DH	47H
1302	6DH	52H
1303	6DH	5DH
1304	6DH	67H
1305	6DH	72H
1306	6DH	7DH
1307	6EH	07H
1308	6EH	12H
1309	6EH	1DH
1310	6EH	27H
1311	6EH	32H
1312	6EH	3DH
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1314	6EH	52H
1315	6EH	5DH
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1317	6EH	72H
1318	6EH	7DH
1319	6FH	07H
1320	6FH	12H
1321	6FH	1DH
1322	6FH	27H
1323	6FH	32H

1324	6FH	3DH
1325	6FH	47H
1326	6FH	52H
1327	6FH	5DH
1328	6FH	67H
1329	6FH	72H
1330	6FH	7DH
1331	70H	07H
1332	70H	12H
1333	70H	1DH
1334	70H	27H
1335	70H	32H
1336	70H	3DH
1337	70H	47H
1338	70H	52H
1339	70H	5DH
1340	70H	67H
1341	70H	72H
1342	70H	7DH
1343	71H	07H
1344	71H	12H
1345	71H	1DH
1346	71H	27H
1347	71H	32H
1348	71H	3DH
1349	71H	47H
1350	71H	52H
1351	71H	5DH
1352	71H	67H
1353	71H	72H
1354	71H	7DH
1355	72H	07H
1356	72H	12H
1357	72H	1DH
1358	72H	27H
1359	72H	32H
1360	72H	3DH
1361	72H	47H
1362	72H	52H
1363	72H	5DH
1364	72H	67H
1365	72H	72H
1366	72H	7DH

1367	73H	07H
1368	73H	12H
1369	73H	1DH
1370	73H	27H
1371	73H	32H
1372	73H	3DH
1373	73H	47H
1374	73H	52H
1375	73H	5DH
1376	73H	67H
1377	73H	72H
1378	73H	7DH
1379	74H	07H
1380	74H	12H
1381	74H	1DH
1382	74H	27H
1383	74H	32H
1384	74H	3DH
1385	74H	47H
1386	74H	52H
1387	74H	5DH
1388	74H	67H
1389	74H	72H
1390	74H	7DH
1391	75H	07H
1392	75H	12H
1393	75H	1DH
1394	75H	27H
1395	75H	32H
1396	75H	3DH
1397	75H	47H
1398	75H	52H
1399	75H	5DH
1400	75H	67H
1401	75H	72H
1402	75H	7DH
1403	76H	07H
1404	76H	12H
1405	76H	1DH
1406	76H	27H
1407	76H	32H
1408	76H	3DH
1409	76H	47H

1410	76H	52H
1411	76H	5DH
1412	76H	67H
1413	76H	72H
1414	76H	7DH
1415	77H	07H
1416	77H	12H
1417	77H	1DH
1418	77H	27H
1419	77H	32H
1420	77H	3DH
1421	77H	47H
1422	77H	52H
1423	77H	5DH
1424	77H	67H
1425	77H	72H
1426	77H	7DH
1427	78H	07H
1428	78H	12H
1429	78H	1DH
1430	78H	27H
1431	78H	32H
1432	78H	3CH
1433	78H	47H
1434	78H	52H
1435	78H	5CH
1436	78H	67H
1437	78H	72H
1438	78H	7CH
1439	79H	07H
1440	79H	12H
1441	79H	1CH
1442	79H	27H
1443	79H	32H
1444	79H	3CH
1445	79H	47H
1446	79H	52H
1447	79H	5CH
1448	79H	67H
1449	79H	72H
1450	79H	7CH
1451	7AH	07H
1452	7AH	12H

1453	7AH	1CH
1454	7AH	27H
1455	7AH	32H
1456	7AH	3CH
1457	7AH	47H
1458	7AH	52H
1459	7AH	5CH
1460	7AH	67H
1461	7AH	72H
1462	7AH	7CH
1463	7BH	07H
1464	7BH	12H
1465	7BH	1CH
1466	7BH	27H
1467	7BH	32H
1468	7BH	3CH

1469	7BH	47H
1470	7BH	52H
1471	7BH	5CH
1472	7BH	67H
1473	7BH	72H
1474	7BH	7CH
1475	7CH	07H
1476	7CH	12H
1477	7CH	1CH
1478	7CH	27H
1479	7CH	32H
1480	7CH	3CH
1481	7CH	47H
1482	7CH	52H
1483	7CH	5CH
1484	7CH	67H

1485	7CH	72H
1486	7CH	7CH
1487	7DH	07H
1488	7DH	12H
1489	7DH	1CH
1490	7DH	27H
1491	7DH	32H
1492	7DH	3CH
1493	7DH	47H
1494	7DH	52H
1495	7DH	5CH
1496	7DH	67H
1497	7DH	72H
1498	7DH	7CH
1499	7EH	07H
1500	7EH	12H

TIME X2 = ON		
	CC value	
	MSB	LSB
0.0	00H	00H
0.1	01H	00H
0.2	01H	01H
0.3	01H	03H
0.4	01H	04H
0.5	01H	05H
0.6	01H	06H
0.7	01H	08H
0.8	01H	09H
0.9	01H	0AH
1.0	01H	0CH
1.1	01H	0DH
1.2	01H	0EH
1.3	01H	10H
1.4	01H	11H
1.5	01H	12H
1.6	01H	13H
1.7	01H	15H
1.8	01H	16H
1.9	01H	17H
2.0	01H	19H
2.1	01H	1AH
2.2	01H	1BH
2.3	01H	1DH
2.4	01H	1EH
2.5	01H	1FH
2.6	01H	20H
2.7	01H	22H
2.8	01H	23H
2.9	01H	24H
3.0	01H	26H
3.1	01H	27H
3.2	01H	28H
3.3	01H	29H
3.4	01H	2BH
3.5	01H	2CH
3.6	01H	2DH
3.7	01H	2FH
3.8	01H	30H
3.9	01H	31H
4.0	01H	33H

4.1	01H	34H
4.2	01H	35H
4.3	01H	36H
4.4	01H	38H
4.5	01H	39H
4.6	01H	3AH
4.7	01H	3CH
4.8	01H	3DH
4.9	01H	3EH
5.0	01H	40H
5.1	01H	41H
5.2	01H	42H
5.3	01H	43H
5.4	01H	45H
5.5	01H	46H
5.6	01H	47H
5.7	01H	49H
5.8	01H	4AH
5.9	01H	4BH
6.0	01H	4CH
6.1	01H	4EH
6.2	01H	4FH
6.3	01H	50H
6.4	01H	52H
6.5	01H	53H
6.6	01H	54H
6.7	01H	56H
6.8	01H	57H
6.9	01H	58H
7.0	01H	59H
7.1	01H	5BH
7.2	01H	5CH
7.3	01H	5DH
7.4	01H	5FH
7.5	01H	60H
7.6	01H	61H
7.7	01H	62H
7.8	01H	64H
7.9	01H	65H
8.0	01H	66H
8.1	01H	68H
8.2	01H	69H
8.3	01H	6AH

8.4	01H	6CH
8.5	01H	6DH
8.6	01H	6EH
8.7	01H	6FH
8.8	01H	71H
8.9	01H	72H
9.0	01H	73H
9.1	01H	75H
9.2	01H	76H
9.3	01H	77H
9.4	01H	79H
9.5	01H	7AH
9.6	01H	7BH
9.7	01H	7CH
9.8	01H	7EH
9.9	01H	7FH
10	02H	00H
11	02H	05H
12	02H	0BH
13	02H	10H
14	02H	15H
15	02H	1BH
16	02H	20H
17	02H	25H
18	02H	2AH
19	02H	30H
20	02H	35H
21	02H	3AH
22	02H	40H
23	02H	45H
24	02H	4AH
25	02H	50H
26	02H	55H
27	02H	5AH
28	02H	60H
29	02H	65H
30	02H	6AH
31	02H	70H
32	02H	75H
33	02H	7AH
34	02H	7FH
35	03H	05H
36	03H	0AH

37	03H	0FH		80	04H	74H		123	06H	58H
38	03H	15H		81	04H	79H		124	06H	5EH
39	03H	1AH		82	04H	7EH		125	06H	63H
40	03H	1FH		83	05H	04H		126	06H	68H
41	03H	25H		84	05H	09H		127	06H	6EH
42	03H	2AH		85	05H	0EH		128	06H	73H
43	03H	2FH		86	05H	14H		129	06H	78H
44	03H	35H		87	05H	19H		130	06H	7DH
45	03H	3AH		88	05H	1EH		131	07H	03H
46	03H	3FH		89	05H	24H		132	07H	08H
47	03H	45H		90	05H	29H		133	07H	0DH
48	03H	4AH		91	05H	2EH		134	07H	13H
49	03H	4FH		92	05H	34H		135	07H	18H
50	03H	54H		93	05H	39H		136	07H	1DH
51	03H	5AH		94	05H	3EH		137	07H	23H
52	03H	5FH		95	05H	44H		138	07H	28H
53	03H	64H		96	05H	49H		139	07H	2DH
54	03H	6AH		97	05H	4EH		140	07H	33H
55	03H	6FH		98	05H	53H		141	07H	38H
56	03H	74H		99	05H	59H		142	07H	3DH
57	03H	7AH		100	05H	5EH		143	07H	43H
58	03H	7FH		101	05H	63H		144	07H	48H
59	04H	04H		102	05H	69H		145	07H	4DH
60	04H	0AH		103	05H	6EH		146	07H	52H
61	04H	0FH		104	05H	73H		147	07H	58H
62	04H	14H		105	05H	79H		148	07H	5DH
63	04H	1AH		106	05H	7EH		149	07H	62H
64	04H	1FH		107	06H	03H		150	07H	68H
65	04H	24H		108	06H	09H		151	07H	6DH
66	04H	29H		109	06H	0EH		152	07H	72H
67	04H	2FH		110	06H	13H		153	07H	78H
68	04H	34H		111	06H	19H		154	07H	7DH
69	04H	39H		112	06H	1EH		155	08H	02H
70	04H	3FH		113	06H	23H		156	08H	08H
71	04H	44H		114	06H	28H		157	08H	0DH
72	04H	49H		115	06H	2EH		158	08H	12H
73	04H	4FH		116	06H	33H		159	08H	18H
74	04H	54H		117	06H	38H		160	08H	1DH
75	04H	59H		118	06H	3EH		161	08H	22H
76	04H	5FH		119	06H	43H		162	08H	27H
77	04H	64H		120	06H	48H		163	08H	2DH
78	04H	69H		121	06H	4EH		164	08H	32H
79	04H	6FH		122	06H	53H		165	08H	37H

166	08H	3DH		209	0AH	21H		252	0CH	06H
167	08H	42H		210	0AH	26H		253	0CH	0BH
168	08H	47H		211	0AH	2CH		254	0CH	10H
169	08H	4DH		212	0AH	31H		255	0CH	16H
170	08H	52H		213	0AH	36H		256	0CH	1BH
171	08H	57H		214	0AH	3CH		257	0CH	20H
172	08H	5DH		215	0AH	41H		258	0CH	25H
173	08H	62H		216	0AH	46H		259	0CH	2BH
174	08H	67H		217	0AH	4CH		260	0CH	30H
175	08H	6DH		218	0AH	51H		261	0CH	35H
176	08H	72H		219	0AH	56H		262	0CH	3BH
177	08H	77H		220	0AH	5CH		263	0CH	40H
178	08H	7CH		221	0AH	61H		264	0CH	45H
179	09H	02H		222	0AH	66H		265	0CH	4BH
180	09H	07H		223	0AH	6CH		266	0CH	50H
181	09H	0CH		224	0AH	71H		267	0CH	55H
182	09H	12H		225	0AH	76H		268	0CH	5BH
183	09H	17H		226	0AH	7BH		269	0CH	60H
184	09H	1CH		227	0BH	01H		270	0CH	65H
185	09H	22H		228	0BH	06H		271	0CH	6BH
186	09H	27H		229	0BH	0BH		272	0CH	70H
187	09H	2CH		230	0BH	11H		273	0CH	75H
188	09H	32H		231	0BH	16H		274	0CH	7AH
189	09H	37H		232	0BH	1BH		275	0DH	00H
190	09H	3CH		233	0BH	21H		276	0DH	05H
191	09H	42H		234	0BH	26H		277	0DH	0AH
192	09H	47H		235	0BH	2BH		278	0DH	10H
193	09H	4CH		236	0BH	31H		279	0DH	15H
194	09H	51H		237	0BH	36H		280	0DH	1AH
195	09H	57H		238	0BH	3BH		281	0DH	20H
196	09H	5CH		239	0BH	41H		282	0DH	25H
197	09H	61H		240	0BH	46H		283	0DH	2AH
198	09H	67H		241	0BH	4BH		284	0DH	30H
199	09H	6CH		242	0BH	50H		285	0DH	35H
200	09H	71H		243	0BH	56H		286	0DH	3AH
201	09H	77H		244	0BH	5BH		287	0DH	40H
202	09H	7CH		245	0BH	60H		288	0DH	45H
203	0AH	01H		246	0BH	66H		289	0DH	4AH
204	0AH	07H		247	0BH	6BH		290	0DH	4FH
205	0AH	0CH		248	0BH	70H		291	0DH	55H
206	0AH	11H		249	0BH	76H		292	0DH	5AH
207	0AH	17H		250	0BH	7BH		293	0DH	5FH
208	0AH	1CH		251	0CH	00H		294	0DH	65H

295	0DH	6AH		338	0FH	4EH		381	11H	33H
296	0DH	6FH		339	0FH	54H		382	11H	38H
297	0DH	75H		340	0FH	59H		383	11H	3EH
298	0DH	7AH		341	0FH	5EH		384	11H	43H
299	0DH	7FH		342	0FH	64H		385	11H	48H
300	0EH	05H		343	0FH	69H		386	11H	4DH
301	0EH	0AH		344	0FH	6EH		387	11H	53H
302	0EH	0FH		345	0FH	74H		388	11H	58H
303	0EH	15H		346	0FH	79H		389	11H	5DH
304	0EH	1AH		347	0FH	7EH		390	11H	63H
305	0EH	1FH		348	10H	04H		391	11H	68H
306	0EH	24H		349	10H	09H		392	11H	6DH
307	0EH	2AH		350	10H	0EH		393	11H	73H
308	0EH	2FH		351	10H	14H		394	11H	78H
309	0EH	34H		352	10H	19H		395	11H	7DH
310	0EH	3AH		353	10H	1EH		396	12H	03H
311	0EH	3FH		354	10H	23H		397	12H	08H
312	0EH	44H		355	10H	29H		398	12H	0DH
313	0EH	4AH		356	10H	2EH		399	12H	13H
314	0EH	4FH		357	10H	33H		400	12H	18H
315	0EH	54H		358	10H	39H		401	12H	1DH
316	0EH	5AH		359	10H	3EH		402	12H	22H
317	0EH	5FH		360	10H	43H		403	12H	28H
318	0EH	64H		361	10H	49H		404	12H	2DH
319	0EH	6AH		362	10H	4EH		405	12H	32H
320	0EH	6FH		363	10H	53H		406	12H	38H
321	0EH	74H		364	10H	59H		407	12H	3DH
322	0EH	79H		365	10H	5EH		408	12H	42H
323	0EH	7FH		366	10H	63H		409	12H	48H
324	0FH	04H		367	10H	69H		410	12H	4DH
325	0FH	09H		368	10H	6EH		411	12H	52H
326	0FH	0FH		369	10H	73H		412	12H	58H
327	0FH	14H		370	10H	78H		413	12H	5DH
328	0FH	19H		371	10H	7EH		414	12H	62H
329	0FH	1FH		372	11H	03H		415	12H	68H
330	0FH	24H		373	11H	08H		416	12H	6DH
331	0FH	29H		374	11H	0EH		417	12H	72H
332	0FH	2FH		375	11H	13H		418	12H	77H
333	0FH	34H		376	11H	18H		419	12H	7DH
334	0FH	39H		377	11H	1EH		420	13H	02H
335	0FH	3FH		378	11H	23H		421	13H	07H
336	0FH	44H		379	11H	28H		422	13H	0DH
337	0FH	49H		380	11H	2EH		423	13H	12H

424	13H	17H
425	13H	1DH
426	13H	22H
427	13H	27H
428	13H	2DH
429	13H	32H
430	13H	37H
431	13H	3DH
432	13H	42H
433	13H	47H
434	13H	4CH
435	13H	52H
436	13H	57H
437	13H	5CH
438	13H	62H
439	13H	67H
440	13H	6CH
441	13H	72H
442	13H	77H
443	13H	7CH
444	14H	02H
445	14H	07H
446	14H	0CH
447	14H	12H
448	14H	17H
449	14H	1CH
450	14H	21H
451	14H	27H
452	14H	2CH
453	14H	31H
454	14H	37H
455	14H	3CH
456	14H	41H
457	14H	47H
458	14H	4CH
459	14H	51H
460	14H	57H
461	14H	5CH
462	14H	61H
463	14H	67H
464	14H	6CH
465	14H	71H
466	14H	76H

467	14H	7CH
468	15H	01H
469	15H	06H
470	15H	0CH
471	15H	11H
472	15H	16H
473	15H	1CH
474	15H	21H
475	15H	26H
476	15H	2CH
477	15H	31H
478	15H	36H
479	15H	3CH
480	15H	41H
481	15H	46H
482	15H	4BH
483	15H	51H
484	15H	56H
485	15H	5BH
486	15H	61H
487	15H	66H
488	15H	6BH
489	15H	71H
490	15H	76H
491	15H	7BH
492	16H	01H
493	16H	06H
494	16H	0BH
495	16H	11H
496	16H	16H
497	16H	1BH
498	16H	20H
499	16H	26H
500	16H	2BH
501	16H	30H
502	16H	36H
503	16H	3BH
504	16H	40H
505	16H	46H
506	16H	4BH
507	16H	50H
508	16H	56H
509	16H	5BH

510	16H	60H
511	16H	66H
512	16H	6BH
513	16H	70H
514	16H	75H
515	16H	7BH
516	17H	00H
517	17H	05H
518	17H	0BH
519	17H	10H
520	17H	15H
521	17H	1BH
522	17H	20H
523	17H	25H
524	17H	2BH
525	17H	30H
526	17H	35H
527	17H	3BH
528	17H	40H
529	17H	45H
530	17H	4AH
531	17H	50H
532	17H	55H
533	17H	5AH
534	17H	60H
535	17H	65H
536	17H	6AH
537	17H	70H
538	17H	75H
539	17H	7AH
540	18H	00H
541	18H	05H
542	18H	0AH
543	18H	10H
544	18H	15H
545	18H	1AH
546	18H	1FH
547	18H	25H
548	18H	2AH
549	18H	2FH
550	18H	35H
551	18H	3AH
552	18H	3FH

553	18H	45H
554	18H	4AH
555	18H	4FH
556	18H	55H
557	18H	5AH
558	18H	5FH
559	18H	65H
560	18H	6AH
561	18H	6FH
562	18H	74H
563	18H	7AH
564	18H	7FH
565	19H	04H
566	19H	0AH
567	19H	0FH
568	19H	14H
569	19H	1AH
570	19H	1FH
571	19H	24H
572	19H	2AH
573	19H	2FH
574	19H	34H
575	19H	3AH
576	19H	3FH
577	19H	44H
578	19H	49H
579	19H	4FH
580	19H	54H
581	19H	59H
582	19H	5FH
583	19H	64H
584	19H	69H
585	19H	6FH
586	19H	74H
587	19H	79H
588	19H	7FH
589	1AH	04H
590	1AH	09H
591	1AH	0FH
592	1AH	14H
593	1AH	19H
594	1AH	1EH
595	1AH	24H
596	1AH	29H
597	1AH	2EH
598	1AH	34H
599	1AH	39H
600	1AH	3EH
601	1AH	44H
602	1AH	49H
603	1AH	4EH
604	1AH	54H
605	1AH	59H
606	1AH	5EH
607	1AH	64H
608	1AH	69H
609	1AH	6EH
610	1AH	73H
611	1AH	79H
612	1AH	7EH
613	1BH	03H
614	1BH	09H
615	1BH	0EH
616	1BH	13H
617	1BH	19H
618	1BH	1EH
619	1BH	23H
620	1BH	29H
621	1BH	2EH
622	1BH	33H
623	1BH	39H
624	1BH	3EH
625	1BH	43H
626	1BH	48H
627	1BH	4EH
628	1BH	53H
629	1BH	58H
630	1BH	5EH
631	1BH	63H
632	1BH	68H
633	1BH	6EH
634	1BH	73H
635	1BH	78H
636	1BH	7EH
637	1CH	03H
638	1CH	08H
639	1CH	0EH
640	1CH	13H
641	1CH	18H
642	1CH	1DH
643	1CH	23H
644	1CH	28H
645	1CH	2DH
646	1CH	33H
647	1CH	38H
648	1CH	3DH
649	1CH	43H
650	1CH	48H
651	1CH	4DH
652	1CH	53H
653	1CH	58H
654	1CH	5DH
655	1CH	63H
656	1CH	68H
657	1CH	6DH
658	1CH	72H
659	1CH	78H
660	1CH	7DH
661	1DH	02H
662	1DH	08H
663	1DH	0DH
664	1DH	12H
665	1DH	18H
666	1DH	1DH
667	1DH	22H
668	1DH	28H
669	1DH	2DH
670	1DH	32H
671	1DH	38H
672	1DH	3DH
673	1DH	42H
674	1DH	47H
675	1DH	4DH
676	1DH	52H
677	1DH	57H
678	1DH	5DH
679	1DH	62H
680	1DH	67H
681	1DH	6DH

682	1DH	72H		725	1FH	56H		768	21H	3BH
683	1DH	77H		726	1FH	5CH		769	21H	40H
684	1DH	7DH		727	1FH	61H		770	21H	45H
685	1EH	02H		728	1FH	66H		771	21H	4BH
686	1EH	07H		729	1FH	6CH		772	21H	50H
687	1EH	0DH		730	1FH	71H		773	21H	55H
688	1EH	12H		731	1FH	76H		774	21H	5BH
689	1EH	17H		732	1FH	7CH		775	21H	60H
690	1EH	1CH		733	20H	01H		776	21H	65H
691	1EH	22H		734	20H	06H		777	21H	6BH
692	1EH	27H		735	20H	0CH		778	21H	70H
693	1EH	2CH		736	20H	11H		779	21H	75H
694	1EH	32H		737	20H	16H		780	21H	7BH
695	1EH	37H		738	20H	1BH		781	22H	00H
696	1EH	3CH		739	20H	21H		782	22H	05H
697	1EH	42H		740	20H	26H		783	22H	0BH
698	1EH	47H		741	20H	2BH		784	22H	10H
699	1EH	4CH		742	20H	31H		785	22H	15H
700	1EH	52H		743	20H	36H		786	22H	1AH
701	1EH	57H		744	20H	3BH		787	22H	20H
702	1EH	5CH		745	20H	41H		788	22H	25H
703	1EH	62H		746	20H	46H		789	22H	2AH
704	1EH	67H		747	20H	4BH		790	22H	30H
705	1EH	6CH		748	20H	51H		791	22H	35H
706	1EH	71H		749	20H	56H		792	22H	3AH
707	1EH	77H		750	20H	5BH		793	22H	40H
708	1EH	7CH		751	20H	61H		794	22H	45H
709	1FH	01H		752	20H	66H		795	22H	4AH
710	1FH	07H		753	20H	6BH		796	22H	50H
711	1FH	0CH		754	20H	70H		797	22H	55H
712	1FH	11H		755	20H	76H		798	22H	5AH
713	1FH	17H		756	20H	7BH		799	22H	60H
714	1FH	1CH		757	21H	00H		800	22H	65H
715	1FH	21H		758	21H	06H		801	22H	6AH
716	1FH	27H		759	21H	0BH		802	22H	6FH
717	1FH	2CH		760	21H	10H		803	22H	75H
718	1FH	31H		761	21H	16H		804	22H	7AH
719	1FH	37H		762	21H	1BH		805	22H	7FH
720	1FH	3CH		763	21H	20H		806	23H	05H
721	1FH	41H		764	21H	26H		807	23H	0AH
722	1FH	46H		765	21H	2BH		808	23H	0FH
723	1FH	4CH		766	21H	30H		809	23H	15H
724	1FH	51H		767	21H	36H		810	23H	1AH

811	23H	1FH
812	23H	25H
813	23H	2AH
814	23H	2FH
815	23H	35H
816	23H	3AH
817	23H	3FH
818	23H	44H
819	23H	4AH
820	23H	4FH
821	23H	54H
822	23H	5AH
823	23H	5FH
824	23H	64H
825	23H	6AH
826	23H	6FH
827	23H	74H
828	23H	7AH
829	23H	7FH
830	24H	04H
831	24H	0AH
832	24H	0FH
833	24H	14H
834	24H	19H
835	24H	1FH
836	24H	24H
837	24H	29H
838	24H	2FH
839	24H	34H
840	24H	39H
841	24H	3FH
842	24H	44H
843	24H	49H
844	24H	4FH
845	24H	54H
846	24H	59H
847	24H	5FH
848	24H	64H
849	24H	69H
850	24H	6EH
851	24H	74H
852	24H	79H
853	24H	7EH

854	25H	04H
855	25H	09H
856	25H	0EH
857	25H	14H
858	25H	19H
859	25H	1EH
860	25H	24H
861	25H	29H
862	25H	2EH
863	25H	34H
864	25H	39H
865	25H	3EH
866	25H	43H
867	25H	49H
868	25H	4EH
869	25H	53H
870	25H	59H
871	25H	5EH
872	25H	63H
873	25H	69H
874	25H	6EH
875	25H	73H
876	25H	79H
877	25H	7EH
878	26H	03H
879	26H	09H
880	26H	0EH
881	26H	13H
882	26H	18H
883	26H	1EH
884	26H	23H
885	26H	28H
886	26H	2EH
887	26H	33H
888	26H	38H
889	26H	3EH
890	26H	43H
891	26H	48H
892	26H	4EH
893	26H	53H
894	26H	58H
895	26H	5EH
896	26H	63H

897	26H	68H
898	26H	6DH
899	26H	73H
900	26H	78H
901	26H	7DH
902	27H	03H
903	27H	08H
904	27H	0DH
905	27H	13H
906	27H	18H
907	27H	1DH
908	27H	23H
909	27H	28H
910	27H	2DH
911	27H	33H
912	27H	38H
913	27H	3DH
914	27H	42H
915	27H	48H
916	27H	4DH
917	27H	52H
918	27H	58H
919	27H	5DH
920	27H	62H
921	27H	68H
922	27H	6DH
923	27H	72H
924	27H	78H
925	27H	7DH
926	28H	02H
927	28H	08H
928	28H	0DH
929	28H	12H
930	28H	17H
931	28H	1DH
932	28H	22H
933	28H	27H
934	28H	2DH
935	28H	32H
936	28H	37H
937	28H	3DH
938	28H	42H
939	28H	47H

940	28H	4DH
941	28H	52H
942	28H	57H
943	28H	5DH
944	28H	62H
945	28H	67H
946	28H	6CH
947	28H	72H
948	28H	77H
949	28H	7CH
950	29H	02H
951	29H	07H
952	29H	0CH
953	29H	12H
954	29H	17H
955	29H	1CH
956	29H	22H
957	29H	27H
958	29H	2CH
959	29H	32H
960	29H	37H
961	29H	3CH
962	29H	41H
963	29H	47H
964	29H	4CH
965	29H	51H
966	29H	57H
967	29H	5CH
968	29H	61H
969	29H	67H
970	29H	6CH
971	29H	71H
972	29H	77H
973	29H	7CH
974	2AH	01H
975	2AH	07H
976	2AH	0CH
977	2AH	11H
978	2AH	16H
979	2AH	1CH
980	2AH	21H
981	2AH	26H
982	2AH	2CH

983	2AH	31H
984	2AH	36H
985	2AH	3CH
986	2AH	41H
987	2AH	46H
988	2AH	4CH
989	2AH	51H
990	2AH	56H
991	2AH	5CH
992	2AH	61H
993	2AH	66H
994	2AH	6BH
995	2AH	71H
996	2AH	76H
997	2AH	7BH
998	2BH	01H
999	2BH	06H
1000	2BH	0BH
1001	2BH	11H
1002	2BH	16H
1003	2BH	1BH
1004	2BH	21H
1005	2BH	26H
1006	2BH	2BH
1007	2BH	31H
1008	2BH	36H
1009	2BH	3BH
1010	2BH	40H
1011	2BH	46H
1012	2BH	4BH
1013	2BH	50H
1014	2BH	56H
1015	2BH	5BH
1016	2BH	60H
1017	2BH	66H
1018	2BH	6BH
1019	2BH	70H
1020	2BH	76H
1021	2BH	7BH
1022	2CH	00H
1023	2CH	06H
1024	2CH	0BH
1025	2CH	10H

1026	2CH	15H
1027	2CH	1BH
1028	2CH	20H
1029	2CH	25H
1030	2CH	2BH
1031	2CH	30H
1032	2CH	35H
1033	2CH	3BH
1034	2CH	40H
1035	2CH	45H
1036	2CH	4BH
1037	2CH	50H
1038	2CH	55H
1039	2CH	5BH
1040	2CH	60H
1041	2CH	65H
1042	2CH	6AH
1043	2CH	70H
1044	2CH	75H
1045	2CH	7AH
1046	2DH	00H
1047	2DH	05H
1048	2DH	0AH
1049	2DH	10H
1050	2DH	15H
1051	2DH	1AH
1052	2DH	20H
1053	2DH	25H
1054	2DH	2AH
1055	2DH	30H
1056	2DH	35H
1057	2DH	3AH
1058	2DH	3FH
1059	2DH	45H
1060	2DH	4AH
1061	2DH	4FH
1062	2DH	55H
1063	2DH	5AH
1064	2DH	5FH
1065	2DH	65H
1066	2DH	6AH
1067	2DH	6FH
1068	2DH	75H

1069	2DH	7AH
1070	2DH	7FH
1071	2EH	05H
1072	2EH	0AH
1073	2EH	0FH
1074	2EH	14H
1075	2EH	1AH
1076	2EH	1FH
1077	2EH	24H
1078	2EH	2AH
1079	2EH	2FH
1080	2EH	34H
1081	2EH	3AH
1082	2EH	3FH
1083	2EH	44H
1084	2EH	4AH
1085	2EH	4FH
1086	2EH	54H
1087	2EH	5AH
1088	2EH	5FH
1089	2EH	64H
1090	2EH	69H
1091	2EH	6FH
1092	2EH	74H
1093	2EH	79H
1094	2EH	7FH
1095	2FH	04H
1096	2FH	09H
1097	2FH	0FH
1098	2FH	14H
1099	2FH	19H
1100	2FH	1FH
1101	2FH	24H
1102	2FH	29H
1103	2FH	2FH
1104	2FH	34H
1105	2FH	39H
1106	2FH	3EH
1107	2FH	44H
1108	2FH	49H
1109	2FH	4EH
1110	2FH	54H
1111	2FH	59H

1112	2FH	5EH
1113	2FH	64H
1114	2FH	69H
1115	2FH	6EH
1116	2FH	74H
1117	2FH	79H
1118	2FH	7EH
1119	30H	04H
1120	30H	09H
1121	30H	0EH
1122	30H	13H
1123	30H	19H
1124	30H	1EH
1125	30H	23H
1126	30H	29H
1127	30H	2EH
1128	30H	33H
1129	30H	39H
1130	30H	3EH
1131	30H	43H
1132	30H	49H
1133	30H	4EH
1134	30H	53H
1135	30H	59H
1136	30H	5EH
1137	30H	63H
1138	30H	68H
1139	30H	6EH
1140	30H	73H
1141	30H	78H
1142	30H	7EH
1143	31H	03H
1144	31H	08H
1145	31H	0EH
1146	31H	13H
1147	31H	18H
1148	31H	1EH
1149	31H	23H
1150	31H	28H
1151	31H	2EH
1152	31H	33H
1153	31H	38H
1154	31H	3DH

1155	31H	43H
1156	31H	48H
1157	31H	4DH
1158	31H	53H
1159	31H	58H
1160	31H	5DH
1161	31H	63H
1162	31H	68H
1163	31H	6DH
1164	31H	73H
1165	31H	78H
1166	31H	7DH
1167	32H	03H
1168	32H	08H
1169	32H	0DH
1170	32H	12H
1171	32H	18H
1172	32H	1DH
1173	32H	22H
1174	32H	28H
1175	32H	2DH
1176	32H	32H
1177	32H	38H
1178	32H	3DH
1179	32H	42H
1180	32H	48H
1181	32H	4DH
1182	32H	52H
1183	32H	58H
1184	32H	5DH
1185	32H	62H
1186	32H	67H
1187	32H	6DH
1188	32H	72H
1189	32H	77H
1190	32H	7DH
1191	33H	02H
1192	33H	07H
1193	33H	0DH
1194	33H	12H
1195	33H	17H
1196	33H	1DH
1197	33H	22H

1198	33H	27H
1199	33H	2DH
1200	33H	32H
1201	33H	37H
1202	33H	3CH
1203	33H	42H
1204	33H	47H
1205	33H	4CH
1206	33H	52H
1207	33H	57H
1208	33H	5CH
1209	33H	62H
1210	33H	67H
1211	33H	6CH
1212	33H	72H
1213	33H	77H
1214	33H	7CH
1215	34H	02H
1216	34H	07H
1217	34H	0CH
1218	34H	11H
1219	34H	17H
1220	34H	1CH
1221	34H	21H
1222	34H	27H
1223	34H	2CH
1224	34H	31H
1225	34H	37H
1226	34H	3CH
1227	34H	41H
1228	34H	47H
1229	34H	4CH
1230	34H	51H
1231	34H	57H
1232	34H	5CH
1233	34H	61H
1234	34H	66H
1235	34H	6CH
1236	34H	71H
1237	34H	76H
1238	34H	7CH
1239	35H	01H
1240	35H	06H

1241	35H	0CH
1242	35H	11H
1243	35H	16H
1244	35H	1CH
1245	35H	21H
1246	35H	26H
1247	35H	2CH
1248	35H	31H
1249	35H	36H
1250	35H	3BH
1251	35H	41H
1252	35H	46H
1253	35H	4BH
1254	35H	51H
1255	35H	56H
1256	35H	5BH
1257	35H	61H
1258	35H	66H
1259	35H	6BH
1260	35H	71H
1261	35H	76H
1262	35H	7BH
1263	36H	01H
1264	36H	06H
1265	36H	0BH
1266	36H	10H
1267	36H	16H
1268	36H	1BH
1269	36H	20H
1270	36H	26H
1271	36H	2BH
1272	36H	30H
1273	36H	36H
1274	36H	3BH
1275	36H	40H
1276	36H	46H
1277	36H	4BH
1278	36H	50H
1279	36H	56H
1280	36H	5BH
1281	36H	60H
1282	36H	65H
1283	36H	6BH

1284	36H	70H
1285	36H	75H
1286	36H	7BH
1287	37H	00H
1288	37H	05H
1289	37H	0BH
1290	37H	10H
1291	37H	15H
1292	37H	1BH
1293	37H	20H
1294	37H	25H
1295	37H	2BH
1296	37H	30H
1297	37H	35H
1298	37H	3AH
1299	37H	40H
1300	37H	45H
1301	37H	4AH
1302	37H	50H
1303	37H	55H
1304	37H	5AH
1305	37H	60H
1306	37H	65H
1307	37H	6AH
1308	37H	70H
1309	37H	75H
1310	37H	7AH
1311	38H	00H
1312	38H	05H
1313	38H	0AH
1314	38H	0FH
1315	38H	15H
1316	38H	1AH
1317	38H	1FH
1318	38H	25H
1319	38H	2AH
1320	38H	2FH
1321	38H	35H
1322	38H	3AH
1323	38H	3FH
1324	38H	45H
1325	38H	4AH
1326	38H	4FH

1327	38H	55H		1370	3AH	39H		1413	3CH	1DH
1328	38H	5AH		1371	3AH	3EH		1414	3CH	23H
1329	38H	5FH		1372	3AH	44H		1415	3CH	28H
1330	38H	64H		1373	3AH	49H		1416	3CH	2DH
1331	38H	6AH		1374	3AH	4EH		1417	3CH	33H
1332	38H	6FH		1375	3AH	54H		1418	3CH	38H
1333	38H	74H		1376	3AH	59H		1419	3CH	3DH
1334	38H	7AH		1377	3AH	5EH		1420	3CH	43H
1335	38H	7FH		1378	3AH	63H		1421	3CH	48H
1336	39H	04H		1379	3AH	69H		1422	3CH	4DH
1337	39H	0AH		1380	3AH	6EH		1423	3CH	53H
1338	39H	0FH		1381	3AH	73H		1424	3CH	58H
1339	39H	14H		1382	3AH	79H		1425	3CH	5DH
1340	39H	1AH		1383	3AH	7EH		1426	3CH	62H
1341	39H	1FH		1384	3BH	03H		1427	3CH	68H
1342	39H	24H		1385	3BH	09H		1428	3CH	6DH
1343	39H	2AH		1386	3BH	0EH		1429	3CH	72H
1344	39H	2FH		1387	3BH	13H		1430	3CH	78H
1345	39H	34H		1388	3BH	19H		1431	3CH	7DH
1346	39H	39H		1389	3BH	1EH		1432	3DH	02H
1347	39H	3FH		1390	3BH	23H		1433	3DH	08H
1348	39H	44H		1391	3BH	29H		1434	3DH	0DH
1349	39H	49H		1392	3BH	2EH		1435	3DH	12H
1350	39H	4FH		1393	3BH	33H		1436	3DH	18H
1351	39H	54H		1394	3BH	38H		1437	3DH	1DH
1352	39H	59H		1395	3BH	3EH		1438	3DH	22H
1353	39H	5FH		1396	3BH	43H		1439	3DH	28H
1354	39H	64H		1397	3BH	48H		1440	3DH	2DH
1355	39H	69H		1398	3BH	4EH		1441	3DH	32H
1356	39H	6FH		1399	3BH	53H		1442	3DH	37H
1357	39H	74H		1400	3BH	58H		1443	3DH	3DH
1358	39H	79H		1401	3BH	5EH		1444	3DH	42H
1359	39H	7FH		1402	3BH	63H		1445	3DH	47H
1360	3AH	04H		1403	3BH	68H		1446	3DH	4DH
1361	3AH	09H		1404	3BH	6EH		1447	3DH	52H
1362	3AH	0EH		1405	3BH	73H		1448	3DH	57H
1363	3AH	14H		1406	3BH	78H		1449	3DH	5DH
1364	3AH	19H		1407	3BH	7EH		1450	3DH	62H
1365	3AH	1EH		1408	3CH	03H		1451	3DH	67H
1366	3AH	24H		1409	3CH	08H		1452	3DH	6DH
1367	3AH	29H		1410	3CH	0DH		1453	3DH	72H
1368	3AH	2EH		1411	3CH	13H		1454	3DH	77H
1369	3AH	34H		1412	3CH	18H		1455	3DH	7DH

1456	3EH	02H
1457	3EH	07H
1458	3EH	0CH
1459	3EH	12H
1460	3EH	17H
1461	3EH	1CH
1462	3EH	22H
1463	3EH	27H
1464	3EH	2CH
1465	3EH	32H
1466	3EH	37H
1467	3EH	3CH
1468	3EH	42H
1469	3EH	47H
1470	3EH	4CH
1471	3EH	52H
1472	3EH	57H
1473	3EH	5CH
1474	3EH	61H
1475	3EH	67H
1476	3EH	6CH
1477	3EH	71H
1478	3EH	77H
1479	3EH	7CH
1480	3FH	01H
1481	3FH	07H
1482	3FH	0CH
1483	3FH	11H
1484	3FH	17H
1485	3FH	1CH
1486	3FH	21H
1487	3FH	27H
1488	3FH	2CH
1489	3FH	31H
1490	3FH	36H
1491	3FH	3CH
1492	3FH	41H
1493	3FH	46H
1494	3FH	4CH
1495	3FH	51H
1496	3FH	56H
1497	3FH	5CH
1498	3FH	61H

1499	3FH	66H
1500	3FH	6CH
1501	3FH	71H
1502	3FH	76H
1503	3FH	7CH
1504	40H	01H
1505	40H	06H
1506	40H	0BH
1507	40H	11H
1508	40H	16H
1509	40H	1BH
1510	40H	21H
1511	40H	26H
1512	40H	2BH
1513	40H	31H
1514	40H	36H
1515	40H	3BH
1516	40H	41H
1517	40H	46H
1518	40H	4BH
1519	40H	51H
1520	40H	56H
1521	40H	5BH
1522	40H	60H
1523	40H	66H
1524	40H	6BH
1525	40H	70H
1526	40H	76H
1527	40H	7BH
1528	41H	00H
1529	41H	06H
1530	41H	0BH
1531	41H	10H
1532	41H	16H
1533	41H	1BH
1534	41H	20H
1535	41H	26H
1536	41H	2BH
1537	41H	30H
1538	41H	35H
1539	41H	3BH
1540	41H	40H
1541	41H	45H

1542	41H	4BH
1543	41H	50H
1544	41H	55H
1545	41H	5BH
1546	41H	60H
1547	41H	65H
1548	41H	6BH
1549	41H	70H
1550	41H	75H
1551	41H	7BH
1552	42H	00H
1553	42H	05H
1554	42H	0AH
1555	42H	10H
1556	42H	15H
1557	42H	1AH
1558	42H	20H
1559	42H	25H
1560	42H	2AH
1561	42H	30H
1562	42H	35H
1563	42H	3AH
1564	42H	40H
1565	42H	45H
1566	42H	4AH
1567	42H	50H
1568	42H	55H
1569	42H	5AH
1570	42H	5FH
1571	42H	65H
1572	42H	6AH
1573	42H	6FH
1574	42H	75H
1575	42H	7AH
1576	42H	7FH
1577	43H	05H
1578	43H	0AH
1579	43H	0FH
1580	43H	15H
1581	43H	1AH
1582	43H	1FH
1583	43H	25H
1584	43H	2AH

1585	43H	2FH		1628	45H	14H		1671	46H	78H
1586	43H	34H		1629	45H	19H		1672	46H	7DH
1587	43H	3AH		1630	45H	1EH		1673	47H	03H
1588	43H	3FH		1631	45H	24H		1674	47H	08H
1589	43H	44H		1632	45H	29H		1675	47H	0DH
1590	43H	4AH		1633	45H	2EH		1676	47H	13H
1591	43H	4FH		1634	45H	33H		1677	47H	18H
1592	43H	54H		1635	45H	39H		1678	47H	1DH
1593	43H	5AH		1636	45H	3EH		1679	47H	23H
1594	43H	5FH		1637	45H	43H		1680	47H	28H
1595	43H	64H		1638	45H	49H		1681	47H	2DH
1596	43H	6AH		1639	45H	4EH		1682	47H	32H
1597	43H	6FH		1640	45H	53H		1683	47H	38H
1598	43H	74H		1641	45H	59H		1684	47H	3DH
1599	43H	7AH		1642	45H	5EH		1685	47H	42H
1600	43H	7FH		1643	45H	63H		1686	47H	48H
1601	44H	04H		1644	45H	69H		1687	47H	4DH
1602	44H	09H		1645	45H	6EH		1688	47H	52H
1603	44H	0FH		1646	45H	73H		1689	47H	58H
1604	44H	14H		1647	45H	79H		1690	47H	5DH
1605	44H	19H		1648	45H	7EH		1691	47H	62H
1606	44H	1FH		1649	46H	03H		1692	47H	68H
1607	44H	24H		1650	46H	08H		1693	47H	6DH
1608	44H	29H		1651	46H	0EH		1694	47H	72H
1609	44H	2FH		1652	46H	13H		1695	47H	78H
1610	44H	34H		1653	46H	18H		1696	47H	7DH
1611	44H	39H		1654	46H	1EH		1697	48H	02H
1612	44H	3FH		1655	46H	23H		1698	48H	07H
1613	44H	44H		1656	46H	28H		1699	48H	0DH
1614	44H	49H		1657	46H	2EH		1700	48H	12H
1615	44H	4FH		1658	46H	33H		1701	48H	17H
1616	44H	54H		1659	46H	38H		1702	48H	1DH
1617	44H	59H		1660	46H	3EH		1703	48H	22H
1618	44H	5EH		1661	46H	43H		1704	48H	27H
1619	44H	64H		1662	46H	48H		1705	48H	2DH
1620	44H	69H		1663	46H	4EH		1706	48H	32H
1621	44H	6EH		1664	46H	53H		1707	48H	37H
1622	44H	74H		1665	46H	58H		1708	48H	3DH
1623	44H	79H		1666	46H	5DH		1709	48H	42H
1624	44H	7EH		1667	46H	63H		1710	48H	47H
1625	45H	04H		1668	46H	68H		1711	48H	4DH
1626	45H	09H		1669	46H	6DH		1712	48H	52H
1627	45H	0EH		1670	46H	73H		1713	48H	57H

1714	48H	5CH		1757	4AH	41H		1800	4CH	25H
1715	48H	62H		1758	4AH	46H		1801	4CH	2BH
1716	48H	67H		1759	4AH	4CH		1802	4CH	30H
1717	48H	6CH		1760	4AH	51H		1803	4CH	35H
1718	48H	72H		1761	4AH	56H		1804	4CH	3BH
1719	48H	77H		1762	4AH	5BH		1805	4CH	40H
1720	48H	7CH		1763	4AH	61H		1806	4CH	45H
1721	49H	02H		1764	4AH	66H		1807	4CH	4BH
1722	49H	07H		1765	4AH	6BH		1808	4CH	50H
1723	49H	0CH		1766	4AH	71H		1809	4CH	55H
1724	49H	12H		1767	4AH	76H		1810	4CH	5AH
1725	49H	17H		1768	4AH	7BH		1811	4CH	60H
1726	49H	1CH		1769	4BH	01H		1812	4CH	65H
1727	49H	22H		1770	4BH	06H		1813	4CH	6AH
1728	49H	27H		1771	4BH	0BH		1814	4CH	70H
1729	49H	2CH		1772	4BH	11H		1815	4CH	75H
1730	49H	31H		1773	4BH	16H		1816	4CH	7AH
1731	49H	37H		1774	4BH	1BH		1817	4DH	00H
1732	49H	3CH		1775	4BH	21H		1818	4DH	05H
1733	49H	41H		1776	4BH	26H		1819	4DH	0AH
1734	49H	47H		1777	4BH	2BH		1820	4DH	10H
1735	49H	4CH		1778	4BH	30H		1821	4DH	15H
1736	49H	51H		1779	4BH	36H		1822	4DH	1AH
1737	49H	57H		1780	4BH	3BH		1823	4DH	20H
1738	49H	5CH		1781	4BH	40H		1824	4DH	25H
1739	49H	61H		1782	4BH	46H		1825	4DH	2AH
1740	49H	67H		1783	4BH	4BH		1826	4DH	2FH
1741	49H	6CH		1784	4BH	50H		1827	4DH	35H
1742	49H	71H		1785	4BH	56H		1828	4DH	3AH
1743	49H	77H		1786	4BH	5BH		1829	4DH	3FH
1744	49H	7CH		1787	4BH	60H		1830	4DH	45H
1745	4AH	01H		1788	4BH	66H		1831	4DH	4AH
1746	4AH	06H		1789	4BH	6BH		1832	4DH	4FH
1747	4AH	0CH		1790	4BH	70H		1833	4DH	55H
1748	4AH	11H		1791	4BH	76H		1834	4DH	5AH
1749	4AH	16H		1792	4BH	7BH		1835	4DH	5FH
1750	4AH	1CH		1793	4CH	00H		1836	4DH	65H
1751	4AH	21H		1794	4CH	05H		1837	4DH	6AH
1752	4AH	26H		1795	4CH	0BH		1838	4DH	6FH
1753	4AH	2CH		1796	4CH	10H		1839	4DH	75H
1754	4AH	31H		1797	4CH	15H		1840	4DH	7AH
1755	4AH	36H		1798	4CH	1BH		1841	4DH	7FH
1756	4AH	3CH		1799	4CH	20H		1842	4EH	04H

1843	4EH	0AH
1844	4EH	0FH
1845	4EH	14H
1846	4EH	1AH
1847	4EH	1FH
1848	4EH	24H
1849	4EH	2AH
1850	4EH	2FH
1851	4EH	34H
1852	4EH	3AH
1853	4EH	3FH
1854	4EH	44H
1855	4EH	4AH
1856	4EH	4FH
1857	4EH	54H
1858	4EH	59H
1859	4EH	5FH
1860	4EH	64H
1861	4EH	69H
1862	4EH	6FH
1863	4EH	74H
1864	4EH	79H
1865	4EH	7FH
1866	4FH	04H
1867	4FH	09H
1868	4FH	0FH
1869	4FH	14H
1870	4FH	19H
1871	4FH	1FH
1872	4FH	24H
1873	4FH	29H
1874	4FH	2EH
1875	4FH	34H
1876	4FH	39H
1877	4FH	3EH
1878	4FH	44H
1879	4FH	49H
1880	4FH	4EH
1881	4FH	54H
1882	4FH	59H
1883	4FH	5EH
1884	4FH	64H
1885	4FH	69H
1886	4FH	6EH
1887	4FH	74H
1888	4FH	79H
1889	4FH	7EH
1890	50H	03H
1891	50H	09H
1892	50H	0EH
1893	50H	13H
1894	50H	19H
1895	50H	1EH
1896	50H	23H
1897	50H	29H
1898	50H	2EH
1899	50H	33H
1900	50H	39H
1901	50H	3EH
1902	50H	43H
1903	50H	49H
1904	50H	4EH
1905	50H	53H
1906	50H	58H
1907	50H	5EH
1908	50H	63H
1909	50H	68H
1910	50H	6EH
1911	50H	73H
1912	50H	78H
1913	50H	7EH
1914	51H	03H
1915	51H	08H
1916	51H	0EH
1917	51H	13H
1918	51H	18H
1919	51H	1EH
1920	51H	23H
1921	51H	28H
1922	51H	2DH
1923	51H	33H
1924	51H	38H
1925	51H	3DH
1926	51H	43H
1927	51H	48H
1928	51H	4DH
1929	51H	53H
1930	51H	58H
1931	51H	5DH
1932	51H	63H
1933	51H	68H
1934	51H	6DH
1935	51H	73H
1936	51H	78H
1937	51H	7DH
1938	52H	02H
1939	52H	08H
1940	52H	0DH
1941	52H	12H
1942	52H	18H
1943	52H	1DH
1944	52H	22H
1945	52H	28H
1946	52H	2DH
1947	52H	32H
1948	52H	38H
1949	52H	3DH
1950	52H	42H
1951	52H	48H
1952	52H	4DH
1953	52H	52H
1954	52H	57H
1955	52H	5DH
1956	52H	62H
1957	52H	67H
1958	52H	6DH
1959	52H	72H
1960	52H	77H
1961	52H	7DH
1962	53H	02H
1963	53H	07H
1964	53H	0DH
1965	53H	12H
1966	53H	17H
1967	53H	1DH
1968	53H	22H
1969	53H	27H
1970	53H	2CH
1971	53H	32H

1972	53H	37H
1973	53H	3CH
1974	53H	42H
1975	53H	47H
1976	53H	4CH
1977	53H	52H
1978	53H	57H
1979	53H	5CH
1980	53H	62H
1981	53H	67H
1982	53H	6CH
1983	53H	72H
1984	53H	77H
1985	53H	7CH
1986	54H	01H
1987	54H	07H
1988	54H	0CH
1989	54H	11H
1990	54H	17H
1991	54H	1CH
1992	54H	21H
1993	54H	27H
1994	54H	2CH
1995	54H	31H
1996	54H	37H
1997	54H	3CH
1998	54H	41H
1999	54H	47H
2000	54H	4CH
2001	54H	51H
2002	54H	56H
2003	54H	5CH
2004	54H	61H
2005	54H	66H
2006	54H	6CH
2007	54H	71H
2008	54H	76H
2009	54H	7CH
2010	55H	01H
2011	55H	06H
2012	55H	0CH
2013	55H	11H
2014	55H	16H

2015	55H	1CH
2016	55H	21H
2017	55H	26H
2018	55H	2BH
2019	55H	31H
2020	55H	36H
2021	55H	3BH
2022	55H	41H
2023	55H	46H
2024	55H	4BH
2025	55H	51H
2026	55H	56H
2027	55H	5BH
2028	55H	61H
2029	55H	66H
2030	55H	6BH
2031	55H	71H
2032	55H	76H
2033	55H	7BH
2034	56H	00H
2035	56H	06H
2036	56H	0BH
2037	56H	10H
2038	56H	16H
2039	56H	1BH
2040	56H	20H
2041	56H	26H
2042	56H	2BH
2043	56H	30H
2044	56H	36H
2045	56H	3BH
2046	56H	40H
2047	56H	46H
2048	56H	4BH
2049	56H	50H
2050	56H	55H
2051	56H	5BH
2052	56H	60H
2053	56H	65H
2054	56H	6BH
2055	56H	70H
2056	56H	75H
2057	56H	7BH

2058	57H	00H
2059	57H	05H
2060	57H	0BH
2061	57H	10H
2062	57H	15H
2063	57H	1BH
2064	57H	20H
2065	57H	25H
2066	57H	2AH
2067	57H	30H
2068	57H	35H
2069	57H	3AH
2070	57H	40H
2071	57H	45H
2072	57H	4AH
2073	57H	50H
2074	57H	55H
2075	57H	5AH
2076	57H	60H
2077	57H	65H
2078	57H	6AH
2079	57H	70H
2080	57H	75H
2081	57H	7AH
2082	57H	7FH
2083	58H	05H
2084	58H	0AH
2085	58H	0FH
2086	58H	15H
2087	58H	1AH
2088	58H	1FH
2089	58H	25H
2090	58H	2AH
2091	58H	2FH
2092	58H	35H
2093	58H	3AH
2094	58H	3FH
2095	58H	45H
2096	58H	4AH
2097	58H	4FH
2098	58H	54H
2099	58H	5AH
2100	58H	5FH

2101	58H	64H
2102	58H	6AH
2103	58H	6FH
2104	58H	74H
2105	58H	7AH
2106	58H	7FH
2107	59H	04H
2108	59H	0AH
2109	59H	0FH
2110	59H	14H
2111	59H	1AH
2112	59H	1FH
2113	59H	24H
2114	59H	29H
2115	59H	2FH
2116	59H	34H
2117	59H	39H
2118	59H	3FH
2119	59H	44H
2120	59H	49H
2121	59H	4FH
2122	59H	54H
2123	59H	59H
2124	59H	5FH
2125	59H	64H
2126	59H	69H
2127	59H	6FH
2128	59H	74H
2129	59H	79H
2130	59H	7EH
2131	5AH	04H
2132	5AH	09H
2133	5AH	0EH
2134	5AH	14H
2135	5AH	19H
2136	5AH	1EH
2137	5AH	24H
2138	5AH	29H
2139	5AH	2EH
2140	5AH	34H
2141	5AH	39H
2142	5AH	3EH
2143	5AH	44H

2144	5AH	49H
2145	5AH	4EH
2146	5AH	53H
2147	5AH	59H
2148	5AH	5EH
2149	5AH	63H
2150	5AH	69H
2151	5AH	6EH
2152	5AH	73H
2153	5AH	79H
2154	5AH	7EH
2155	5BH	03H
2156	5BH	09H
2157	5BH	0EH
2158	5BH	13H
2159	5BH	19H
2160	5BH	1EH
2161	5BH	23H
2162	5BH	28H
2163	5BH	2EH
2164	5BH	33H
2165	5BH	38H
2166	5BH	3EH
2167	5BH	43H
2168	5BH	48H
2169	5BH	4EH
2170	5BH	53H
2171	5BH	58H
2172	5BH	5EH
2173	5BH	63H
2174	5BH	68H
2175	5BH	6EH
2176	5BH	73H
2177	5BH	78H
2178	5BH	7DH
2179	5CH	03H
2180	5CH	08H
2181	5CH	0DH
2182	5CH	13H
2183	5CH	18H
2184	5CH	1DH
2185	5CH	23H
2186	5CH	28H

2187	5CH	2DH
2188	5CH	33H
2189	5CH	38H
2190	5CH	3DH
2191	5CH	43H
2192	5CH	48H
2193	5CH	4DH
2194	5CH	52H
2195	5CH	58H
2196	5CH	5DH
2197	5CH	62H
2198	5CH	68H
2199	5CH	6DH
2200	5CH	72H
2201	5CH	78H
2202	5CH	7DH
2203	5DH	02H
2204	5DH	08H
2205	5DH	0DH
2206	5DH	12H
2207	5DH	18H
2208	5DH	1DH
2209	5DH	22H
2210	5DH	27H
2211	5DH	2DH
2212	5DH	32H
2213	5DH	37H
2214	5DH	3DH
2215	5DH	42H
2216	5DH	47H
2217	5DH	4DH
2218	5DH	52H
2219	5DH	57H
2220	5DH	5DH
2221	5DH	62H
2222	5DH	67H
2223	5DH	6DH
2224	5DH	72H
2225	5DH	77H
2226	5DH	7CH
2227	5EH	02H
2228	5EH	07H
2229	5EH	0CH

2230	5EH	12H
2231	5EH	17H
2232	5EH	1CH
2233	5EH	22H
2234	5EH	27H
2235	5EH	2CH
2236	5EH	32H
2237	5EH	37H
2238	5EH	3CH
2239	5EH	42H
2240	5EH	47H
2241	5EH	4CH
2242	5EH	51H
2243	5EH	57H
2244	5EH	5CH
2245	5EH	61H
2246	5EH	67H
2247	5EH	6CH
2248	5EH	71H
2249	5EH	77H
2250	5EH	7CH
2251	5FH	01H
2252	5FH	07H
2253	5FH	0CH
2254	5FH	11H
2255	5FH	17H
2256	5FH	1CH
2257	5FH	21H
2258	5FH	26H
2259	5FH	2CH
2260	5FH	31H
2261	5FH	36H
2262	5FH	3CH
2263	5FH	41H
2264	5FH	46H
2265	5FH	4CH
2266	5FH	51H
2267	5FH	56H
2268	5FH	5CH
2269	5FH	61H
2270	5FH	66H
2271	5FH	6CH
2272	5FH	71H

2273	5FH	76H
2274	5FH	7BH
2275	60H	01H
2276	60H	06H
2277	60H	0BH
2278	60H	11H
2279	60H	16H
2280	60H	1BH
2281	60H	21H
2282	60H	26H
2283	60H	2BH
2284	60H	31H
2285	60H	36H
2286	60H	3BH
2287	60H	41H
2288	60H	46H
2289	60H	4BH
2290	60H	50H
2291	60H	56H
2292	60H	5BH
2293	60H	60H
2294	60H	66H
2295	60H	6BH
2296	60H	70H
2297	60H	76H
2298	60H	7BH
2299	61H	00H
2300	61H	06H
2301	61H	0BH
2302	61H	10H
2303	61H	16H
2304	61H	1BH
2305	61H	20H
2306	61H	25H
2307	61H	2BH
2308	61H	30H
2309	61H	35H
2310	61H	3BH
2311	61H	40H
2312	61H	45H
2313	61H	4BH
2314	61H	50H
2315	61H	55H

2316	61H	5BH
2317	61H	60H
2318	61H	65H
2319	61H	6BH
2320	61H	70H
2321	61H	75H
2322	61H	7AH
2323	62H	00H
2324	62H	05H
2325	62H	0AH
2326	62H	10H
2327	62H	15H
2328	62H	1AH
2329	62H	20H
2330	62H	25H
2331	62H	2AH
2332	62H	30H
2333	62H	35H
2334	62H	3AH
2335	62H	40H
2336	62H	45H
2337	62H	4AH
2338	62H	4FH
2339	62H	55H
2340	62H	5AH
2341	62H	5FH
2342	62H	65H
2343	62H	6AH
2344	62H	6FH
2345	62H	75H
2346	62H	7AH
2347	62H	7FH
2348	63H	05H
2349	63H	0AH
2350	63H	0FH
2351	63H	15H
2352	63H	1AH
2353	63H	1FH
2354	63H	24H
2355	63H	2AH
2356	63H	2FH
2357	63H	34H
2358	63H	3AH

2359	63H	3FH
2360	63H	44H
2361	63H	4AH
2362	63H	4FH
2363	63H	54H
2364	63H	5AH
2365	63H	5FH
2366	63H	64H
2367	63H	6AH
2368	63H	6FH
2369	63H	74H
2370	63H	79H
2371	63H	7FH
2372	64H	04H
2373	64H	09H
2374	64H	0FH
2375	64H	14H
2376	64H	19H
2377	64H	1FH
2378	64H	24H
2379	64H	29H
2380	64H	2FH
2381	64H	34H
2382	64H	39H
2383	64H	3FH
2384	64H	44H
2385	64H	49H
2386	64H	4EH
2387	64H	54H
2388	64H	59H
2389	64H	5EH
2390	64H	64H
2391	64H	69H
2392	64H	6EH
2393	64H	74H
2394	64H	79H
2395	64H	7EH
2396	65H	04H
2397	65H	09H
2398	65H	0EH
2399	65H	14H
2400	65H	19H
2401	65H	1EH

2402	65H	23H
2403	65H	29H
2404	65H	2EH
2405	65H	33H
2406	65H	39H
2407	65H	3EH
2408	65H	43H
2409	65H	49H
2410	65H	4EH
2411	65H	53H
2412	65H	59H
2413	65H	5EH
2414	65H	63H
2415	65H	69H
2416	65H	6EH
2417	65H	73H
2418	65H	78H
2419	65H	7EH
2420	66H	03H
2421	66H	08H
2422	66H	0EH
2423	66H	13H
2424	66H	18H
2425	66H	1EH
2426	66H	23H
2427	66H	28H
2428	66H	2EH
2429	66H	33H
2430	66H	38H
2431	66H	3EH
2432	66H	43H
2433	66H	48H
2434	66H	4DH
2435	66H	53H
2436	66H	58H
2437	66H	5DH
2438	66H	63H
2439	66H	68H
2440	66H	6DH
2441	66H	73H
2442	66H	78H
2443	66H	7DH
2444	67H	03H

2445	67H	08H
2446	67H	0DH
2447	67H	13H
2448	67H	18H
2449	67H	1DH
2450	67H	22H
2451	67H	28H
2452	67H	2DH
2453	67H	32H
2454	67H	38H
2455	67H	3DH
2456	67H	42H
2457	67H	48H
2458	67H	4DH
2459	67H	52H
2460	67H	58H
2461	67H	5DH
2462	67H	62H
2463	67H	68H
2464	67H	6DH
2465	67H	72H
2466	67H	77H
2467	67H	7DH
2468	68H	02H
2469	68H	07H
2470	68H	0DH
2471	68H	12H
2472	68H	17H
2473	68H	1DH
2474	68H	22H
2475	68H	27H
2476	68H	2DH
2477	68H	32H
2478	68H	37H
2479	68H	3DH
2480	68H	42H
2481	68H	47H
2482	68H	4CH
2483	68H	52H
2484	68H	57H
2485	68H	5CH
2486	68H	62H
2487	68H	67H

2488	68H	6CH
2489	68H	72H
2490	68H	77H
2491	68H	7CH
2492	69H	02H
2493	69H	07H
2494	69H	0CH
2495	69H	12H
2496	69H	17H
2497	69H	1CH
2498	69H	21H
2499	69H	27H
2500	69H	2CH
2501	69H	31H
2502	69H	37H
2503	69H	3CH
2504	69H	41H
2505	69H	47H
2506	69H	4CH
2507	69H	51H
2508	69H	57H
2509	69H	5CH
2510	69H	61H
2511	69H	67H
2512	69H	6CH
2513	69H	71H
2514	69H	76H
2515	69H	7CH
2516	6AH	01H
2517	6AH	06H
2518	6AH	0CH
2519	6AH	11H
2520	6AH	16H
2521	6AH	1CH
2522	6AH	21H
2523	6AH	26H
2524	6AH	2CH
2525	6AH	31H
2526	6AH	36H
2527	6AH	3CH
2528	6AH	41H
2529	6AH	46H
2530	6AH	4BH

2531	6AH	51H
2532	6AH	56H
2533	6AH	5BH
2534	6AH	61H
2535	6AH	66H
2536	6AH	6BH
2537	6AH	71H
2538	6AH	76H
2539	6AH	7BH
2540	6BH	01H
2541	6BH	06H
2542	6BH	0BH
2543	6BH	11H
2544	6BH	16H
2545	6BH	1BH
2546	6BH	20H
2547	6BH	26H
2548	6BH	2BH
2549	6BH	30H
2550	6BH	36H
2551	6BH	3BH
2552	6BH	40H
2553	6BH	46H
2554	6BH	4BH
2555	6BH	50H
2556	6BH	56H
2557	6BH	5BH
2558	6BH	60H
2559	6BH	66H
2560	6BH	6BH
2561	6BH	70H
2562	6BH	75H
2563	6BH	7BH
2564	6CH	00H
2565	6CH	05H
2566	6CH	0BH
2567	6CH	10H
2568	6CH	15H
2569	6CH	1BH
2570	6CH	20H
2571	6CH	25H
2572	6CH	2BH
2573	6CH	30H

2574	6CH	35H
2575	6CH	3BH
2576	6CH	40H
2577	6CH	45H
2578	6CH	4AH
2579	6CH	50H
2580	6CH	55H
2581	6CH	5AH
2582	6CH	60H
2583	6CH	65H
2584	6CH	6AH
2585	6CH	70H
2586	6CH	75H
2587	6CH	7AH
2588	6DH	00H
2589	6DH	05H
2590	6DH	0AH
2591	6DH	10H
2592	6DH	15H
2593	6DH	1AH
2594	6DH	1FH
2595	6DH	25H
2596	6DH	2AH
2597	6DH	2FH
2598	6DH	35H
2599	6DH	3AH
2600	6DH	3FH
2601	6DH	45H
2602	6DH	4AH
2603	6DH	4FH
2604	6DH	55H
2605	6DH	5AH
2606	6DH	5FH
2607	6DH	65H
2608	6DH	6AH
2609	6DH	6FH
2610	6DH	74H
2611	6DH	7AH
2612	6DH	7FH
2613	6EH	04H
2614	6EH	0AH
2615	6EH	0FH
2616	6EH	14H

2617	6EH	1AH
2618	6EH	1FH
2619	6EH	24H
2620	6EH	2AH
2621	6EH	2FH
2622	6EH	34H
2623	6EH	3AH
2624	6EH	3FH
2625	6EH	44H
2626	6EH	49H
2627	6EH	4FH
2628	6EH	54H
2629	6EH	59H
2630	6EH	5FH
2631	6EH	64H
2632	6EH	69H
2633	6EH	6FH
2634	6EH	74H
2635	6EH	79H
2636	6EH	7FH
2637	6FH	04H
2638	6FH	09H
2639	6FH	0FH
2640	6FH	14H
2641	6FH	19H
2642	6FH	1EH
2643	6FH	24H
2644	6FH	29H
2645	6FH	2EH
2646	6FH	34H
2647	6FH	39H
2648	6FH	3EH
2649	6FH	44H
2650	6FH	49H
2651	6FH	4EH
2652	6FH	54H
2653	6FH	59H
2654	6FH	5EH
2655	6FH	64H
2656	6FH	69H
2657	6FH	6EH
2658	6FH	73H
2659	6FH	79H

2660	6FH	7EH
2661	70H	03H
2662	70H	09H
2663	70H	0EH
2664	70H	13H
2665	70H	19H
2666	70H	1EH
2667	70H	23H
2668	70H	29H
2669	70H	2EH
2670	70H	33H
2671	70H	39H
2672	70H	3EH
2673	70H	43H
2674	70H	48H
2675	70H	4EH
2676	70H	53H
2677	70H	58H
2678	70H	5EH
2679	70H	63H
2680	70H	68H
2681	70H	6EH
2682	70H	73H
2683	70H	78H
2684	70H	7EH
2685	71H	03H
2686	71H	08H
2687	71H	0EH
2688	71H	13H
2689	71H	18H
2690	71H	1DH
2691	71H	23H
2692	71H	28H
2693	71H	2DH
2694	71H	33H
2695	71H	38H
2696	71H	3DH
2697	71H	43H
2698	71H	48H
2699	71H	4DH
2700	71H	53H
2701	71H	58H
2702	71H	5DH

2703	71H	63H
2704	71H	68H
2705	71H	6DH
2706	71H	72H
2707	71H	78H
2708	71H	7DH
2709	72H	02H
2710	72H	08H
2711	72H	0DH
2712	72H	12H
2713	72H	18H
2714	72H	1DH
2715	72H	22H
2716	72H	28H
2717	72H	2DH
2718	72H	32H
2719	72H	38H
2720	72H	3DH
2721	72H	42H
2722	72H	47H
2723	72H	4DH
2724	72H	52H
2725	72H	57H
2726	72H	5DH
2727	72H	62H
2728	72H	67H
2729	72H	6DH
2730	72H	72H
2731	72H	77H
2732	72H	7DH
2733	73H	02H
2734	73H	07H
2735	73H	0DH
2736	73H	12H
2737	73H	17H
2738	73H	1CH
2739	73H	22H
2740	73H	27H
2741	73H	2CH
2742	73H	32H
2743	73H	37H
2744	73H	3CH
2745	73H	42H

2746	73H	47H		2789	75H	2BH		2832	77H	10H
2747	73H	4CH		2790	75H	31H		2833	77H	15H
2748	73H	52H		2791	75H	36H		2834	77H	1AH
2749	73H	57H		2792	75H	3BH		2835	77H	20H
2750	73H	5CH		2793	75H	41H		2836	77H	25H
2751	73H	62H		2794	75H	46H		2837	77H	2AH
2752	73H	67H		2795	75H	4BH		2838	77H	30H
2753	73H	6CH		2796	75H	51H		2839	77H	35H
2754	73H	71H		2797	75H	56H		2840	77H	3AH
2755	73H	77H		2798	75H	5BH		2841	77H	40H
2756	73H	7CH		2799	75H	61H		2842	77H	45H
2757	74H	01H		2800	75H	66H		2843	77H	4AH
2758	74H	07H		2801	75H	6BH		2844	77H	50H
2759	74H	0CH		2802	75H	70H		2845	77H	55H
2760	74H	11H		2803	75H	76H		2846	77H	5AH
2761	74H	17H		2804	75H	7BH		2847	77H	60H
2762	74H	1CH		2805	76H	00H		2848	77H	65H
2763	74H	21H		2806	76H	06H		2849	77H	6AH
2764	74H	27H		2807	76H	0BH		2850	77H	6FH
2765	74H	2CH		2808	76H	10H		2851	77H	75H
2766	74H	31H		2809	76H	16H		2852	77H	7AH
2767	74H	37H		2810	76H	1BH		2853	77H	7FH
2768	74H	3CH		2811	76H	20H		2854	78H	05H
2769	74H	41H		2812	76H	26H		2855	78H	0AH
2770	74H	46H		2813	76H	2BH		2856	78H	0FH
2771	74H	4CH		2814	76H	30H		2857	78H	15H
2772	74H	51H		2815	76H	36H		2858	78H	1AH
2773	74H	56H		2816	76H	3BH		2859	78H	1FH
2774	74H	5CH		2817	76H	40H		2860	78H	25H
2775	74H	61H		2818	76H	45H		2861	78H	2AH
2776	74H	66H		2819	76H	4BH		2862	78H	2FH
2777	74H	6CH		2820	76H	50H		2863	78H	35H
2778	74H	71H		2821	76H	55H		2864	78H	3AH
2779	74H	76H		2822	76H	5BH		2865	78H	3FH
2780	74H	7CH		2823	76H	60H		2866	78H	44H
2781	75H	01H		2824	76H	65H		2867	78H	4AH
2782	75H	06H		2825	76H	6BH		2868	78H	4FH
2783	75H	0CH		2826	76H	70H		2869	78H	54H
2784	75H	11H		2827	76H	75H		2870	78H	5AH
2785	75H	16H		2828	76H	7BH		2871	78H	5FH
2786	75H	1BH		2829	77H	00H		2872	78H	64H
2787	75H	21H		2830	77H	05H		2873	78H	6AH
2788	75H	26H		2831	77H	0BH		2874	78H	6FH

2875	78H	74H
2876	78H	7AH
2877	78H	7FH
2878	79H	04H
2879	79H	0AH
2880	79H	0FH
2881	79H	14H
2882	79H	19H
2883	79H	1FH
2884	79H	24H
2885	79H	29H
2886	79H	2FH
2887	79H	34H
2888	79H	39H
2889	79H	3FH
2890	79H	44H
2891	79H	49H
2892	79H	4FH
2893	79H	54H
2894	79H	59H
2895	79H	5FH
2896	79H	64H
2897	79H	69H
2898	79H	6EH
2899	79H	74H
2900	79H	79H
2901	79H	7EH
2902	7AH	04H
2903	7AH	09H
2904	7AH	0EH
2905	7AH	14H
2906	7AH	19H
2907	7AH	1EH
2908	7AH	24H
2909	7AH	29H
2910	7AH	2EH
2911	7AH	34H
2912	7AH	39H
2913	7AH	3EH
2914	7AH	43H
2915	7AH	49H
2916	7AH	4EH
2917	7AH	53H

2918	7AH	59H
2919	7AH	5EH
2920	7AH	63H
2921	7AH	69H
2922	7AH	6EH
2923	7AH	73H
2924	7AH	79H
2925	7AH	7EH
2926	7BH	03H
2927	7BH	09H
2928	7BH	0EH
2929	7BH	13H
2930	7BH	18H
2931	7BH	1EH
2932	7BH	23H
2933	7BH	28H
2934	7BH	2EH
2935	7BH	33H
2936	7BH	38H
2937	7BH	3EH
2938	7BH	43H
2939	7BH	48H
2940	7BH	4EH
2941	7BH	53H
2942	7BH	58H
2943	7BH	5EH
2944	7BH	63H
2945	7BH	68H
2946	7BH	6DH
2947	7BH	73H
2948	7BH	78H
2949	7BH	7DH
2950	7CH	03H
2951	7CH	08H
2952	7CH	0DH
2953	7CH	13H
2954	7CH	18H
2955	7CH	1DH
2956	7CH	23H
2957	7CH	28H
2958	7CH	2DH
2959	7CH	33H
2960	7CH	38H

2961	7CH	3DH
2962	7CH	42H
2963	7CH	48H
2964	7CH	4DH
2965	7CH	52H
2966	7CH	58H
2967	7CH	5DH
2968	7CH	62H
2969	7CH	68H
2970	7CH	6DH
2971	7CH	72H
2972	7CH	78H
2973	7CH	7DH
2974	7DH	02H
2975	7DH	08H
2976	7DH	0DH
2977	7DH	12H
2978	7DH	17H
2979	7DH	1DH
2980	7DH	22H
2981	7DH	27H
2982	7DH	2DH
2983	7DH	32H
2984	7DH	37H
2985	7DH	3DH
2986	7DH	42H
2987	7DH	47H
2988	7DH	4DH
2989	7DH	52H
2990	7DH	57H
2991	7DH	5DH
2992	7DH	62H
2993	7DH	67H
2994	7DH	6CH
2995	7DH	72H
2996	7DH	77H
2997	7DH	7CH
2998	7EH	02H
2999	7EH	07H
3000	7FH	7FH

MIDI Implementation Chart

Function...	Transmitted	Recognized	Remarks
Basic Default	1 - 16	1 - 16	Memorized
Channel Changed	1 - 16, OFF	1 - 16, OFF	(Non-volatile)
Mode Default	Mode 3	Mode 3	
Messages	X	X	
Altered	*****	X	
Note	X	X	
Number True voice	*****		
Velocity Note ON	X	X	
Note OFF	X	X	
After Key's	X	X	
Touch Ch's	X	X	
Pitch Bend	X	X	
Control 0, 32	X	X	bank select
1 - 31	o *1	o *1	*3
33 - 63	o *1	o *1	*3 *4
64 - 95	o *1	o *1	*3
Change			
Program	o *1	o *1	
Change True Number	*****	0 - 127	
System Exclusive	o	o	
System Song Position	X	X	
Common Song Select	X	X	
Tune Request	X	X	
System Clock	o	o *2	
Real Time Commands	X	X	
Aux All Sounds OFF	X	X	
Reset All Controllers	X	X	
Local ON/OFF	X	X	
Messages All Notes OFF	X	X	
Active Sensing	o	o	
Reset	X	X	
Notes	*1 Switchable to o or x. *2 Recognized when SYNC is set to other than INTERVAL. *3 cc# is depends on the parameters. *4 If the range is exceed 127 and the CC# is 1 - 31 (MSB), these (LSB) are used.		

Mode 1 : Omni On, Poly
Mode 3 : Omni Off, Poly

Mode 2 : Omni On, Mono
Mode 4 : Omni Off, Mono

o : Yes
X : No