



VT6120/VT6121/VT6122

EEPROM Layout

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VIA Networking Technologies, INC.

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Revision History

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1.00	6/27/03	First draft for internal review.	Ryan
1.01	6/30/03	Use new document format.	Ryan
1.02	8/26/03	Update document template	Ryan

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1. EEPROM Layout for VT6120/VT6121/VT6122

b15	b8	b7	b0
ETHER_ID1		ETHER_ID0	00h
ETHER_ID3		ETHER_ID2	01h
ETHER_ID5		ETHER_ID4	02h
SW_Reserved		MII_PHYAD	03h
SUB_SID1		SUB_SID0	04h
SUB_VID1		SUB_VID0	05h
DEV_ID1		DEV_ID0	06h
VEN_ID1		VEN_ID0	07h
Data_SEL		PMCC	08h
AuxCurr		PMU_DATA_REG	09h
MCFG1		MCFG0	0Ah
Max_LAT		Min_GNT	0Bh
DCFG1		DCFG0	0Ch
CFG_B		CFG_A	0Dh
CFG_D		CFG_C	0Eh
CHKSUM		73h	0Fh

2. EEPROM Content

Word Offset	Bit	Default Value by EEPROM Utility	Name	Description
00h ~02h	[47:0]	0000000000001h	ETHER_ID	Ethernet address. Default is an invalid value. Customers SHOULD replace it with a valid Ethernet address.
03h	[7:0]	07h	MII_PHYAD	MII PHY Address. Recommend using the default value.
	[15:8]	00h	SW_Reserved	Reserved for software use. Recommend using the default value.
04h	[15:0]	0110h	SUB_SID	Subsystem ID. Default is an invalid value. Customers SHOULD replace it with their own Subsystem ID. Subsystem IDs are vendor specific.
05h	[15:0]	1106h	SUB_VID	Subsystem Vendor ID. Default is an invalid value. Customers SHOULD replace it with their own Subsystem Vendor ID. Subsystem Vendor IDs can be obtained from the PCI SIG.
06h	[15:0]	3119h	DEV_ID	Device ID. Recommend using the default value.
07h	[15:0]	1106h	VEN_ID	Vendor ID. Recommend using the default value.
08h	[7:0]	1Fh	PMCC	Power Management Capabilities Control Register.
	[15:8]	10h	Data_SEL	PM data select register.
09h	[7:0]	00h	PMU_DATA_REG	PM data register.
	[15:8]	00h	AuxCurr	3.3Vaux auxiliary current.
0Ah	[7:0]	00h	MCFG0	MAC Configuration register 0.
	[15:8]	01h	MCFG1	MAC Configuration register 1.
0Bh	[7:0]	03h	Min_GNT	Minimum grant.
	[15:8]	08h	Max_LAT	Maximum latency.
0Ch	[7:0]	01h	DCFG0	DMA Configuration register 0.
	[15:8]	10h	DCFG1	DMA Configuration register 1.
0Dh	[7:0]	13h	CFG_A	Configuration register A.
	[15:8]	10h	CFG_B	Configuration register B.
0Eh	[7:0]	40h	CFG_C	Configuration register C.
	[15:8]	30h	CFG_D	Configuration register D.
0Fh	[7:0]	73h	PROG_STATUS	EEPROM programmed status.

				The value 73h means this EEPROM had been programmed.
	[15:8]	73h	CHKSUM	EEPROM checksum. Default value is 73h. The checksum is not used at current stage, any value here will be OK.

CFG_C: Word Offset 0Eh[7:0]

Bit	Default Value	Name	Description
[2:0]	0,0,0	Boot_Size selected	0,0,0 = No BootROM 0,0,1 = 8K 0,1,0 = 16K 0,1,1 = 32K 1,X,X = 64K/FlashROM 8K,16K,32K are for legacy use. For VT6110, always use 1,X,X if there is a BootROM.

SW_Reserved: Word Offset 03h[15:8]

Bit	Default Value	Name	Description
[8]	0	Boot_Select	0 = PXE boot 1 = RPL boot
[10:9]	0,0	Boot_Option	When Boot_Select = 0: 0,0 = Hook int 0x19 0,1 = Hook int 0x18 1,0 = Boot from Local Disk 1,1 = BEV (Boot Entry Vector) When Boot_Select = 1: 0,0 = Boot from Network Server 0,1 = Reserved 1,0 = Boot from Local Disk 1,1 = Reserved
[11]	0	Menu_Timer	0 = Wait 3 seconds for user press Ctrl-Tab to show menu 1 = Wait 5 seconds for user press Ctrl-Tab to show menu
[13:12]	0,0	RPL_Timer	0,0 = 30 seconds for RPL find server timeout 0,1 = 15 seconds for RPL find server timeout 1,0 = 60 seconds for RPL find server timeout 1,1 = 120 seconds for RPL find server timeout

NOTE: Devices can work well by using most of the recommended default value. But the values from word offset 00h~05h should be taken care very much, or the device will NOT function.