

# Product Certification Report

Release No : 05E010020

<b>Product Model</b>	<b>ECB-901A</b>
<b>Product Description</b>	
<b>Test Reason</b>	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : ECB-901A A1.0 <input checked="" type="checkbox"/> BIOS: ETX-821 A0.1 BIOS Rev:046 (02/23/2005)  <input checked="" type="checkbox"/> Chipset: ECB-901A A1.0 <input checked="" type="checkbox"/> CPU Type: On ETX CPU Module <input checked="" type="checkbox"/> North Bridge : On ETX CPU Module <input checked="" type="checkbox"/> South Bridge : On ETX CPU Module <input checked="" type="checkbox"/> Audio Chipset : On ETX CPU Module <input checked="" type="checkbox"/> Ethernet Chipset : On ETX CPU Module <input checked="" type="checkbox"/> I/O Chipset : Winbond W83977F-A  <input checked="" type="checkbox"/> Chipset : ETX-821 A0.1 <input checked="" type="checkbox"/> CPU Type : Onboard Intel® Celeron® 600MHz <input checked="" type="checkbox"/> North Bridge : Intel 82852GM <input checked="" type="checkbox"/> South Bridge : Intel 82801 <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC655 <input checked="" type="checkbox"/> Ethernet Chipset : Intel 82562ET <input checked="" type="checkbox"/> I/O Chipset : ITE IT8712F  <input checked="" type="checkbox"/> Remark : ECB-901A A1.0(with ETX-821 A0.1) NPDP P5 Test Report

2005/05/17

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Issue date

Manager

Test Engineer

**Test Result for Certification**

Dynamic / Boot_UP Burn_In Test	Test Condition	Result
Diagnostics Software Burn-In Test.	0°C ~60°C, 48 hrs	PASS
Power On/Off Test.	0°C ~60°C, 24hrs	PASS
<b>Voltage Range Test</b>		
Voltage Range Test – 100V Power Function Test	Room Temperature	PASS
Voltage Range Test – 210V Power Function Test	Room Temperature	PASS
Voltage Range Test – Keyboard Reset Test.–110V	20 Times , DOS Mode	PASS
<b>I/O Peripheral Function Test – I/O Function</b>		<b>Result</b>
Floppy Connector / Driver A: & B:		PASS
Primary IDE Master		PASS
Primary IDE Slave		PASS
Secondary IDE Master		PASS
Secondary IDE Slave		PASS
SATA1 / Serial ATA Connector 1		N/A
SATA2 / Serial ATA Connector 2		N/A
Compact Flash -Type I		PASS
Compact Flash -Type II		PASS
DOC (Disk On Chip)		PASS
DOM (Disk On Module)-40 pin		PASS
DOM (Disk On Module)-44 pin		N/A
COM1		PASS
COM2-232		PASS
COM2-422		PASS
COM2-485		PASS
COM2-Ring/+5V/+12V		PASS
COM3		PASS
COM4		PASS
COM5		N/A
COM6		N/A
Clear CMOS		PASS
PS/2 Mouse & Keyboard (Internal)		N/A
PS/2 Mouse & Keyboard (External)		PASS
Audio Out Selection ( <input type="checkbox"/> W/O Amplifier <input type="checkbox"/> W/Amplifier)		N/A
Audio Connector		PASS
Audio 5.1 Channel S/P DIF		N/A
PCI Slot		PASS
Mini PCI		N/A
VCD Voltage (3.3V or 5V)		PASS
LPT1		PASS
LPT2		PASS
SIR / 115.2Kbps		PASS
FIR / 4M bps		N/A
USB 1 & 2 Ports		PASS
USB 3 & 4 Ports		PASS
USB 5 Port		N/A
USB 6 Port		N/A
USB 2.0 1 & 2 Ports		N/A
USB 2.0 3 & 4 Ports		N/A
USB 2.0 5 Ports		N/A
USB 2.0 6 Ports		N/A
VGA Display		PASS
DVI Function		N/A
DIO Connector		PASS

Card Bus	N/A
PC/104	N/A
PC/104 Plus	N/A
PCI/104	N/A
LCD / TFT	PASS
LCD / LVDS / Channel 1	PASS
LCD / LVDS / Channel 2	N/A
TV-out / AV	PASS
TV-out / S Port Output	PASS
Touch Screen – 8 Wire	N/A
Touch Screen – 5 Wire	N/A
DIMM Slots	PASS
Internal KB & Mouse	N/A
Watchdog IRQ n	PASS
Watchdog Software Control	PASS
<b>I/O Peripheral Function Test – Front Panel &amp; Function</b>	<b>Result</b>
Power On Button	PASS
IDE LED	PASS
External Buzzer	PASS
On Board Buzzer	PASS
Power LED	PASS
Reset Switch	PASS
Keyboard Lock	N/A
CPU FAN Connector	PASS
System FAN Connector	N/A
<b>I/O Peripheral Function Test – Power Connector &amp; Function</b>	<b>Result</b>
ATX Power Connector	PASS
ATX Power_12V Connector	N/A
AT Power Connector (P8&P9)	PASS
4P Power Connector	PASS
Mini 4P Power Connector	PASS
External Power Connector(-12/-5V)	N/A
Option ATX Power Connector (PS-ON / +5VSB)	N/A
<b>I/O Peripheral Function Test – LAN Connector &amp; Function</b>	<b>Result</b>
LAN1 Speed LED	N/A
LAN2 Speed LED	N/A
LAN1 Active LED	PASS
LAN2 Active LED	N/A
LAN1 Link LED	PASS
LAN2 Link LED	N/A
LAN1 10/100 Ethernet	PASS
LAN2 10/100 Ethernet	N/A
<b>I/O Peripheral Function Test – PCI Connector &amp; Function</b>	<b>Result</b>
PCI Slots	PASS
<b>I/O Peripheral Function Test – PME Connector &amp; Function</b>	<b>Result</b>
Option PME Connector	N/A
<b>Power Consumption Test (Use Prova EN61010 to measure current in DOS mode without any devices connected)</b>	
	<b>Onboard Intel Celeron-M 600MHz / FSB:400MHz</b>
Normal Mode(+5V)	3.19A
Suspend Mode(+5V)	2.24A
5VSB / (ATX Power)(Power off Mode)	0.12A
Normal Mode(+12V)	0A
Suspend Mode(+12V)	0A
Normal Mode(+3.3V)(ATX Power)	0A

Suspend Mode(+3.3V)(ATX Power)	0A				
Normal Mode(-12V)	0A				
Suspend Mode(-12V)	0A				
Normal Mode(-5V)	0A				
Suspend Mode(-5V)	0A				
<b>Power Connector Test (110V/220V )</b>	<b>Voltage Range</b>		<b>Result</b>		
ATX Power Supply : Seventeam ST-300BLV [Female]	5 V	110V	5.06V		
		220V	5.07V		
	3.3 V	110V	3.38V		
		220V	3.38V		
	12V	110V	12.07V		
		220V	12.07V		
AT Power Supply : LEMACS SP2-4300F [Female]	5V	110V	5.04V		
		220V	5.04V		
	12V	110V	11.96V		
		220V	11.96V		
AT Power To ATX Connector: AT Power Supply : (Female) .	5V	110V	N/A		
		220V	N/A		
	12V	110V	N/A		
		220V	N/A		
Power 5V Only Operation Function Test	5V (Play VCD)		N/A		
ATX Power simulate AT power (Play VCD)	N/A				
<b>Timer Accuracy Test</b>	<b>Result</b>				
RTC Timer Accuracy of +/-1 sec per day.	PASS				
System Clock Accuracy of +/-1 sec per day.	PASS				
Watchdog Timer Accuracy of +/-20% sec per minute.	PASS				
<b>Network HUB/LAN Connects Test (LAN1)</b>	<b>Result</b>				
<b>LED Indicator Lights Function</b>	<b>LAN1 LED</b>		PASS		
	<b>LAN2 LED</b>		N/A		
<b>HUB (10/100Mbps)</b>	<b>Type</b>	<b>QE Win2K Server [ A ] Workstations [B]</b>	<b>Length Size</b>	<b>Speed</b>	<b>Result</b>
	HP J4095A 24 Ports	A → B	100 M	10/100 Mbps	PASS
	D-Link DGS-1008T	B → A	25 M	10/100 Mbps	PASS
	Intel InBusiness 8 Ports	A → B	100 M	10 Mbps	PASS
	LEMEL LM-S5 5 Ports	B → A	25 M	10/100 Mbps	PASS
	Accton Desktop-3005	A → B	100 M	10/100 Mbps	PASS
SVEC FD916H	B → A	100 M	10 Mbps	PASS	
<b>HUB (1000Mbps)</b>	D-Link DGS-1008T	A → B	100 M	1000 Mbps	N/A
	D-Link DGS-1008T	B → A	25 M	1000 Mbps	N/A
<b>CPU Compatible Test (Windows 2000 Pro)</b>					
<b>CPU Speed</b>		<b>FSB</b>	<b>SPEC</b>	<b>Result</b>	
On board ULV Intel® Celeron 650MHz				PASS	
<b>Memory Test</b>	<b>S/N</b>	<b>Speed</b>	<b>Size</b>	<b>Result</b>	
Siemens HYB39S64160AT-B	[SO-013]	PC100	128MB	PASS	
Infineon HYB39S128800CT-7.5	[SO-024]	PC133	128MB	PASS	
Samsung K4S560832C-TC75	[SO-200201]	PC133	256MB	PASS	
HB52RF648DC-75B	[SO-200106]	PC133	512MB	PASS	
<b>On Board Audio Function Test</b>					<b>Result</b>
System Sound					PASS
Play CD_IN					N/A
Play Sound Recorder					PASS

Line Out		PASS			
Line In		PASS			
Line In Sound Record		PASS			
MIC Speaker	Dynamic	PASS			
	Condenser	PASS			
MIC Sound Recorder	Dynamic	PASS			
	Condenser	PASS			
Game Port		N/A			
Play DVD	Step Forward (4/8/32X)	PASS			
	Step Backward (4/8/20X)	PASS			
Audio 5.1 Channel with S/P DIF Function Test		N/A			
<b>On Board TV Function Test</b>		<b>Result</b>			
NTSC	Japanese NTSC	AV Port	PASS		
		S Port	PASS		
	US NTSC	AV Port	PASS		
		S Port	PASS		
PAL		AV Port	PASS		
<b>On Board LCD Function Test</b>					
LVDS	AU M170EG01 / 17"/1280*1024 /48bit		N/A		
	HYUNDAI HT12X11-200/12.1"/1024*768/18bit		PASS		
	SAMSUNG LTM150XH-L04/1024*768/24bit		N/A		
	AU B104SN02 / 10.4"/800*600 / 18bit		PASS		
TFT	Toshiba LTM10C209A/10.4"/640*480/18bit		PASS		
	Sharp LQ121S1DG11/12.1"/800*600/18bit		N/A		
	Samsung LTM150XS-T01/15"/1024*768/36bit		PASS		
<b>PCI Slot Function (PCI Adapter Card) Test</b>		<b>S/N</b>	<b>Type</b>	<b>Interface</b>	<b>Result</b>
PCI Debug Card		[DG-200200]	Debug Card	PCI	PASS
Matrox G450		[VC-200203]	VGA Card	PCI	PASS
GeForce4 MX-440-8X		[VC-200200]	VGA Card	PCI	PASS
LEMEL SC3000		[SC-001]	Sound Card	PCI	PASS
Takram DC-395U V1.02		[SS-200200]	SCSI Card	PCI	PASS
D-Link FE-530TX Fast Ethernet Adapter		[NW-200202]	LAN Card	PCI	PASS
Intel SB82559 (10/100Mbps)		[NW-013]	LAN Card	PCI	PASS
D-Link DGE-530T 1000BASE-T Gigabit Ethernet Adapter		[NW-200401]	LAN Card	PCI	PASS
D-Link DWL-520+ Wireless LAN		[NW-2002001]	LAN Card	PCI	PASS
Genuine GM56-AMI2019		[MD-007]	Modem Card	PCI	PASS
ABIT HotRod 100 Pro		[RA-001]	RAID Card	PCI	PASS
D-Link DU-520 USB 2.0		[DU-001]	Other Card	PCI	PASS
Tekram TR-822 Serial ATA 150		[SA-001]	Other Card	PCI	PASS
<b>HDD Compatible Test</b>		<b>S/N</b>	<b>Speed</b>		<b>Result</b>
Hitachi / HDS722525VLAT80 / 250GB		[ID-2002003]	ATA100		PASS
IBM / DTLA-307045 / 46.1GB		[ID-041]	ATA100		PASS
FUJITSU / MPE 3136AH / 13.6GB		[ID-033]	ATA66		PASS
Maxtor /4G160J8 / 160GB		[ID-200206]	ATA133		PASS
Quantum / Fireball Plug AS / 30GB		[ID-200111]	ATA100		PASS
Seagate / ST301021A / 10.2GB		[ID-050]	ATA66		PASS
Western / WD400BB-75DEA0 / 40GB		[ID-2002001]	ATA100		PASS
Seagate / ST3120026AS / 120GB / S-ATA		[ID-200305]	ATA100		PASS
<b>CD-ROM / DVD-ROM Test</b>		<b>S/N</b>		<b>Result</b>	
Acer DVP1640A / 16X / DVD-ROM		[CD-044]		PASS	
Creative PC-DVD / 12X / DVD-ROM		[CD-046]		PASS	
IBM GCR-8480B / 48X		[CD-2002013]		PASS	
PINONEER /DVD-121/ CD-ROM /16X		[CD-200303]		PASS	

PHILIPS PBC03210G / 32X10X40 / 12X DVD / CD-RW / DVD-ROM	[CD-2003002]	PASS	
SAMSUNG / SH-W08 / DVD+R 8X/DVD-R 8X/CD-R 32X	[CD-200404]	PASS	
NEC / ND-2500A / DVD R/RW / +R8X-R8X	[CD-200403]	N/A	
SONY CDU4811-81 / 48X / CD-ROM	[CD-030]	N/A	
TEAC CD-540E / 40X / CD-ROM	[CD-042]	PASS	
Installation Windows XP from High Speed Device: BenQ / 4824W1-0N2 / USB2.0 / CD-200304		PASS	
<b>USB Basic Function Test</b>		<b>Result</b>	
CMOS USB Function		PASS	
CMOS USB Keyboard		PASS	
CMOS USB Mouse		N/A	
System Booting Test		PASS	
USB Cable of 1.8 Meters (USB1.1)		PASS	
USB Cable of 1.8 Meters (USB2.0)		PASS	
Compatible Test		PASS	
USB 2.0 Function Test	USB 1 & 2 Ports	PASS	
	USB 3 & 4 Ports	PASS	
	USB 5 & 6 Ports	N/A	
<b>USB Extension Device Function Test</b>	<b>S/N</b>	<b>Type</b>	<b>Result</b>
CyberLink Power DVD XP4.0	[IR-200200]	Remote Control	PASS
BENQ 4824WI-ON2	[CD-200304]	CD-RW	PASS
PLEXTOR PX-S88TU	[CD-2002003]	CD-RW	PASS
Fujitsu USB 2.0 High Speed device (2.5" MHN2100AT)	[ID-200401]	HDD	PASS
IOMEGA ZIP 100MB	[ZP-002]	ZIP	PASS
Mitsumi FL3.5D353GUE/FUE	[FL-200201]	Floppy	PASS
<b>Floppy Disk Controller Function Test</b>		<b>Result</b>	
Copy and Compare File Between C: and A/B		PASS	
Change BIOS Floppy is NONE value		PASS	
SWAP FDD		PASS	
Check BIOS → "Report No FDD for Win95"		N/A	
<b>Peripheral Compatibility-Storage Device</b>	<b>S/N</b>	<b>Interface</b>	<b>Result</b>
FUJITSU MCB3064SS	[MO-001]	SCSI	PASS
IOmega zip 100 parallel port	[ZIP-200401]	Parallel	PASS
IOmega zip 100MB Internal ATAPI Drive	[ZP-001]	IDE	PASS
DOC2000 M-System / MD2200-D16			PASS
PQI FC512 512MB	[CF-200302]	Type-I CF Card	PASS
HITACHI MicroDrive 1GB	[CF-200303]	Type- II CF Card	PASS
<b>Digital I/O Connector Test : CN10</b>		<b>Result</b>	
Input Address (200H)		PASS	
Output Address (200H)		PASS	
VCC		PASS	
GND		PASS	
<b>Adapter Compatibility-Industry Control Card → PC104 , PCI104 , PC104 Plus</b>		<b>Result</b>	
PC104	AAeon PCM-5600 (Modem Module)	N/A	
	AAeon PCM-3115B (PCMCIA Modula)	N/A	
PCI104	AAeon PCM-3730 (Intel 82559 LAN Modula)	N/A	
PC104 Plus	AAeon PCM-3430 (SCSI Module)	N/A	
<b>On-board SCSI Function Test</b>	<b>Interface</b>	<b>Model</b>	<b>Result</b>
RICOH MP7060S	SCSI-CDROM 24X	[CD-045]	N/A
Fujitsu MCB3064SS	SCSI-MO Device	[MO-001]	N/A
Seagate 32155W	SCSI-HDD 2.15GB	[SD-001]	N/A
IBM DNES-309170	SCSI-HDD 9GB	[SD-004]	N/A
Seagate ST39205LW/P	9GB / Ultra160 / LVD	[SD-200101]	N/A
<b>COM Port Send &amp; Receive Test</b>		<b>Result</b>	
COM1 of 15 Meters		PASS	

COM2 of 15 Meters			PASS
COM3 of 15 Meters			PASS
COM4 of 15.Meters			PASS
<b>Disk On Module [DOM] Compatibility Test</b>		<b>Model</b>	<b>Interface</b>
DOM-256-026P Rev: A1K20		[DC-200200]	IDE 40 Pin
DOM-064-426P Rev: A2A11		[DC-200201]	IDE 44 Pin
<b>Mini PCI Slot Compatibility Test</b>		<b>Model</b>	<b>Interface</b>
RTL-8180L Mini PCI Card			LAN Module
AAEON PER-C100 Mini PCICard			LAN Module
AAEON PER-C200 Mini PCI Card			USB Module
<b>COM / LPT Ports &amp; RS-232/422/485 Function Test</b>			<b>Result</b>
Installation MS-DOS6.22 & Windows 2000P From FDD & CDROM			PASS
RS-422 (COM2)			PASS
RS-485 (COM2)			PASS
COM1			PASS
COM2			PASS
COM3			PASS
COM4			PASS
LPT1			PASS
LPT2			PASS
<b>Card Bus Compatibility Test</b>		<b>Model</b>	<b>Result</b>
PQI Compact Flash Adapter + PQI Compact Flash Card 16MB		[PC-200100]+ [CF-200100]	N/A
SanDiak / 4MB / Mass Storage System PCMCIA Card		[PC-003]	N/A
<b>Front Panel &amp; Function Test</b>			<b>Result</b>
Power On Button			PASS
IDE LED			PASS
External Buzzer			PASS
On Board Buzzer			PASS
Power LED			PASS
Reset Switch			PASS
Keyboard Lock			N/A
Ext. K/B Connector			PASS
Internal K/B Connector			N/A
CPU FAN Connector			PASS
System FAN Connector			N/A
<b>IDE Cable Function Test</b>			<b>Result</b>
40 Pin ATA33 Cable			PASS
44Pin ATA33 Cable			PASS
80 Pin ATA100 Cable			PASS
<b>Card Bus Compatibility Function Test</b>		<b>Model</b>	<b>Result</b>
SanDiak 4MB Mass Storage System PCMCIA Card	Slot1 (Up)	[PC-003]	N/A
	Slot2 (Down)		
E-Tech C336MX Data/Fax PCMCIA Card	Slot1 (Up)	[PC-004]	N/A
	Slot2 (Down)		
SanDiak 4MB Mass Storage System PCMCIA Card		[PC-003] + [PC-004]	N/A
<b>Installation Operation System Compatible Test</b>			<b>Result</b>
Linux -RedHat 9.0 / Kernel 2.4.20-8			PASS
Windows Server 2003 English Version / Standard Edition 5.2.3790			N/A
Windows XP Professional English Version V2002 with Service Pack 1			PASS
Windows 2000 Professional English Version V5.00.2195 with Service Pack 4			PASS
Windows 98SE English Version V4.10.2222A			PASS
Windows NT Workstation 4.0 English Version with Service Pack6			N/A
DOS6.22			PASS
<b>Utility and Driver Test</b>			<b>Result</b>

RedHat Linux 9.0 Hardware compatible list for VGA				Default
RedHat Linux 9.0 Hardware compatible list for LAN				Default
RedHat Linux 9.0 Hardware compatible list for Audio				Default
WinXP Pro VGA Driver→ S3 Graphics Twister V6.13.10.1039 01/24/2002				PASS
WinXP Rro LAN Driver→ Realtek RTL8139/810X Family Fast Ethernet NIC V5.505.1004.2002 10/4/2002				PASS
WinXP Pro Audio Driver→ Realtek AC'97 Audio for VIA® Audio Controller V5.10.0.5490				PASS
Win2000 Pro VGA Driver→ S3 Graphics Twister V6.13.10.1030 12/20/2001				PASS
Win2000 Pro LAN Driver→ Realtek RTL8139/810X Family Fast Ethernet NIC V5.505.1004.2002 10/4/2002				PASS
Win2000 Pro Audio Driver→ Realtek AC'97 Audio for VIA® Audio Controller V5.10.0.5490				PASS
Win98SE VGA Driver→ S3 Graphics Twister V4.13.01.3025-13.00.25 1/25/2002				PASS
Win98SE LAN Driver→ Realtek RTL8139/810X Family Fast Ethernet NIC V4.10.2222 12/30/2002				PASS
Win98SE Audio Driver→ Realtek AC'97 Audio for VIA® Audio Controller V5.10.5490 2/26/2004				PASS
<b>BIOS Function Test</b>				<b>Result</b>
Standard CMOS Setup Test				PASS
Boot Sequence Test				PASS
APM Power Manager Test				PASS
ACPI Power Manager Test				PASS
Power On Function Test				N/A
Wake Up Event Test				PASS
CMOS Backup / Clear CMOS Test				PASS
Boot ROM Test (RPL/PXE)				PASS
Supervisor / User Password Test				PASS
Boot Display - CRT Function Test				PASS
TV Standard Function Test				PASS
Init Display First Function Test				PASS
On-Chip Serial ATA Function Test				N/A
SATA Mode-IDE/RAID Function Test				N/A
Voltage Monitor Test				PASS
FAN Speed Monitor Test				PASS
Temperature Monitor Test				PASS
Swap Floppy Drive & Boot up Floppy Seek Function Test				PASS
USB Onboard Device Function Test				PASS
COM Address / IRQ Test				PASS
LPT Address / IRQ Test				PASS
BIOS Awdflash Program Test				PASS
<b>Touch Screen LCD for Serial Ports Test</b>				<b>Result</b>
COM1	Address	IRQ		N/A
COM4	3F8	IRQ4		N/A
	2E8	IRQ11		N/A
<b>Windows 2000 Pro+SP4 Performance Test (VIA C3 1A GHz / 512MB SDRAM)</b>				
<b>ZD Media WinBench 99 V2.0</b>				
Bussiness Disk WinMark99				76400 <sup>2.3</sup> Thousand Byte/sec
Bussiness Graphics WinMark99				167 <sup>2.3</sup>
High-End Disk WinMark99				26800 <sup>2.3</sup> Thousand Byte/sec
High-End Graphics WinMark99				436 <sup>2.3</sup>
<b>Final Reality V1.01—BenchMark Test (Reality Marks)</b>				
2D image Processing Test				4.93
3D Test				3.38
Bus transfer Rate				3.63
Overall Performance				3.88
<b>ZD 3D Winbench 2000 V1.1</b>				
3D WinMark 2000				N/A



3D WinBench2000 Processor Test	1.32 <sup>4.28.29</sup>
<b>ZD Multimedia Content Creation Winstone 2004 v1.0.1</b>	
Multimedia Content Creation Winstone 2004	N/A
<b>3Dmark2001SE Pro (Demo version)</b>	
3DMark2001SE Build 330_ Benchmark mode	3.07
<b>ZD Business Winstone 2004</b>	
Business Winstone 2004	Score: 7.7 / Variance: 1.3%
<b>System Integer Application Test</b>	<b>Result</b>
System Integer Application Test (Burn-in 8 Hours in Room Temperature)	PASS
<b>System Integer Power Consumption Test</b>	<b>Result</b>
Normal Mode(+5V)	2.1A
Normal Mode(+12V)	0.08A
Normal Mode(+3.3V)(ATX-Power Supply)	0A
Normal Mode(-5V)	0A
Normal Mode(-12V)	0A