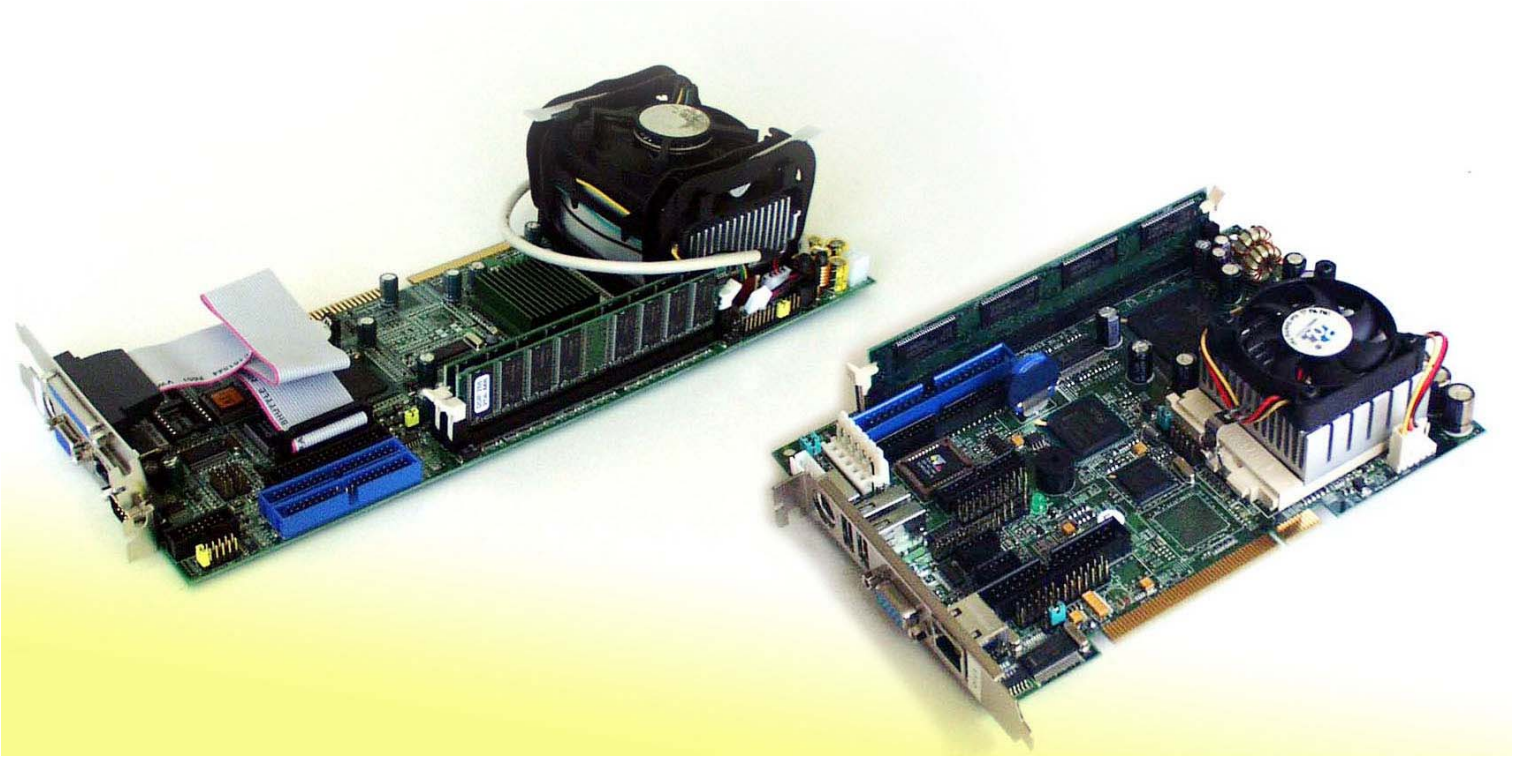


HMI/NC CPU-Karten

andron®

Version	V 1.7
Stand	31.08.2011
Autor/en	Pa.
Bearbeitung/Illustrationen	Pa.
Erstellung	Die Erstellung dieser Unterlage erfolgte mit Microsoft Word und Adobe Illustrator
Warenzeichen	Alle verwendeten Produktnamen und Warenzeichen sind Eigentum ihrer jeweiligen Besitzer.
Schutzvermerk	© andron GmbH 2011. All Rights Reserved. Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte vorbehalten, insbesondere für den Fall der Patenterteilung oder GM-Eintragung.
Verbindlichkeit	Es können weitere, in dieser Dokumentation nicht beschriebene Funktionen in der Steuerung lauffähig sein. Es besteht jedoch kein Anspruch auf diese Funktionen bei Neulieferung bzw. im Servicefall. Änderungen im Inhalt der Dokumentation und Liefermöglichkeiten der Produkte sind vorbehalten.
Herausgeber	andron GmbH, Schlätterstraße 2, D-88142 Wasserburg/Bodensee Telefon +49 (0) 8382/9855-0, Fax +49 (0) 8382/9855-50 e-Mail: info@andron.de www.andron.de

Inhaltsverzeichnis

Inhaltsverzeichnis 3
Revisionsliste 3
Allgemeines 4
EmCore-i6419VL Half-Size Pentium® M / Celeron® M CPU 5
FS-97A Full-Size Pentium® M / Celeron® M CPU 6
IP-4MTP2G Full-Size Pentium® M / Celeron® M CPU 7
F845G/VE Full-Size Pentium® 4 CPU 9
CI-TSPE Half-Size Celeron® CPU 10
Nummernschlüssel 11
CPU und BIOS-Versionsübersicht 12
BIOS 11.0 Default-Einstellungen 14
BIOS 11.1 Default-Einstellungen 18
BIOS 11.2 Default-Einstellungen 22
BIOS 10.0 Default-Einstellungen 26
BIOS 8.0 Default-Einstellungen 30
BIOS 13.2 Default-Einstellungen 33
BIOS 7.0 Default-Einstellungen 36
BIOS 7.1 Default-Einstellungen 39
Weitergehende Informationen 42

Revisionsliste

Version	Datum	Ergänzungen und Änderungen	Kurzzeichen
V 1.0	09.07.2003	Erste Ausgabe	Pa
V 1.1	25.04.2006	Ergänzungen: Pentium M / Celeron M CPU BIOS-Setup V 10.0	Pa
V 1.2	24.01.2006	Layoutänderung in DIN A4	Pa
V 1.3	10.07.2007	Ergänzungen: Neue CPU EmCore-i6419VL Celeron M /Pentium M BIOS-Setup V 11.0/11.1	Pa
V 1.4	18.01.2008	Ergänzungen: BIOS-Setup V 11.2	Pa
V 1.5	25.02.2008	Änderungen: BIOS-Setup V 10.0	Pa
V 1.6	24.03.2011	Änderungen: BIOS-Setup V 11.0.1/11.2.1	Pa
V 1.7	31.08.2011	Ergänzungen: Neue CPU FS-97A mit DVI-Adapter BIOS-Setup V 13.2	Pa

Allgemeines

Kernstück der Steuerung sind zwei leistungsfähige Slot-CPU-Karten, die über eine schnelle PCI to PCI-Bridge miteinander kommunizieren. Dabei ist eine CPU nur für den Steuerungskern (NC-Rechner) und der andere für die Bedienoberfläche (HMI-Rechner) zuständig.

Die Steuerung ist in zwei Varianten mit unterschiedlichen CPU Typen erhältlich.

	bis/until 06.2007		06.2007-06.2011		ab/since 07.2011	
	NC-CPU	HMI-CPU	NC-CPU	HMI-CPU	NC-CPU	HMI-CPU
andronic 2060S	733 MHz 1.2 GHz	733 MHz 1.2 GHz	1.6 GHz/ 1.73 GHz	1.6 GHz/ 1.73 GHz	1.73 GHz	1.73 GHz
	celeron CI-TSPE	celeron CI-TSPE	NEW celeron M EmCore-i6419VL	NEW celeron M EmCore-i6419VL	celeron M EmCore-i6419VL	celeron M EmCore-i6419VL
andronic 2060L	733 MHz 1.2 GHz	1.6 GHz/ 1.73 GHz 1.8 GHz	1.6 GHz/ 1.73 GHz	1.6 GHz/ 1.73 GHz 1.8 GHz	1.73 GHz	1.73 GHz 1.8 GHz
	celeron CI-TSPE	celeron M or pentium M IP-4MTP2G	NEW celeron M EmCore-i6419VL	celeron M or pentium M IP-4MTP2G	celeron M EmCore-i6419VL	NEW celeron M or pentium M FS-97A

EmCore-i6419VL Half-Size Pentium® M / Celeron® M CPU

Die **EmCore-i6419VL** Half-Size PCI Slot-CPU-Karte wurde für Intel® Pentium® M und Celeron® M Prozessoren entwickelt und bietet neben einem Front Side Bus von 400 MHz und bis zu 1 GB DDR SDRAM ausreichend Performance für hohe Anforderungen. Weiterhin sind alle notwendigen Schnittstellen für die gesamte Peripherie vorhanden.

- On-Board LAN Controller → Gigabit Ethernet 10/100, RJ-45
- On-Board Graphic Controller mit 64 MB (shared memory), VGA und DVI Interface
- On-Board I/O Controller für Mouse-, Tastatur-, Serial- und Parallel-Interface
- On-Board UDMA / IDE Controller
- 6 USB 2.0 Ports (4 von außen zugänglich)

Weitere Technische Daten sind im Anhang aus der Herstellerdokumentation zu entnehmen.

FS-97A Full-Size Pentium® M / Celeron® M CPU

Die **FS-97A** Full-Size PICMG Slot-CPU-Karte wurde für Intel® Pentium® M und Celeron® M Prozessoren (Socket 479) entwickelt und bietet neben einem Front Side Bus von 400 MHz und bis zu 2 GB DDR SDRAM ausreichend Performance für hohe Anforderungen. Weiterhin sind alle notwendigen Schnittstellen für die gesamte Peripherie vorhanden.

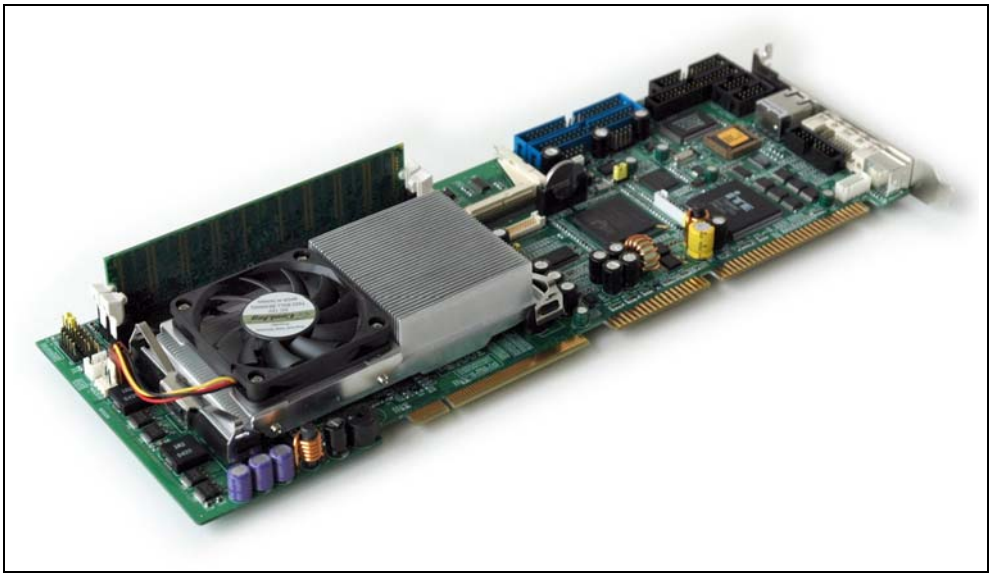
- On-Board LAN Controller → Gigabit Ethernet 10/100/1000, RJ-45
- On-Board Graphic Controller mit 64 MB (shared memory)
- Externes DVI-Adapter Board (optional)
- On-Board I/O Controller für Mouse-, Tastatur-, Serial- und Parallel-Interface
- On-Board UDMA / IDE Controller
- 4 USB 2.0 Ports

Weitere Technische Daten sind im Anhang aus der Herstellerdokumentation zu entnehmen.

IP-4MTP2G Full-Size Pentium® M / Celeron® M CPU

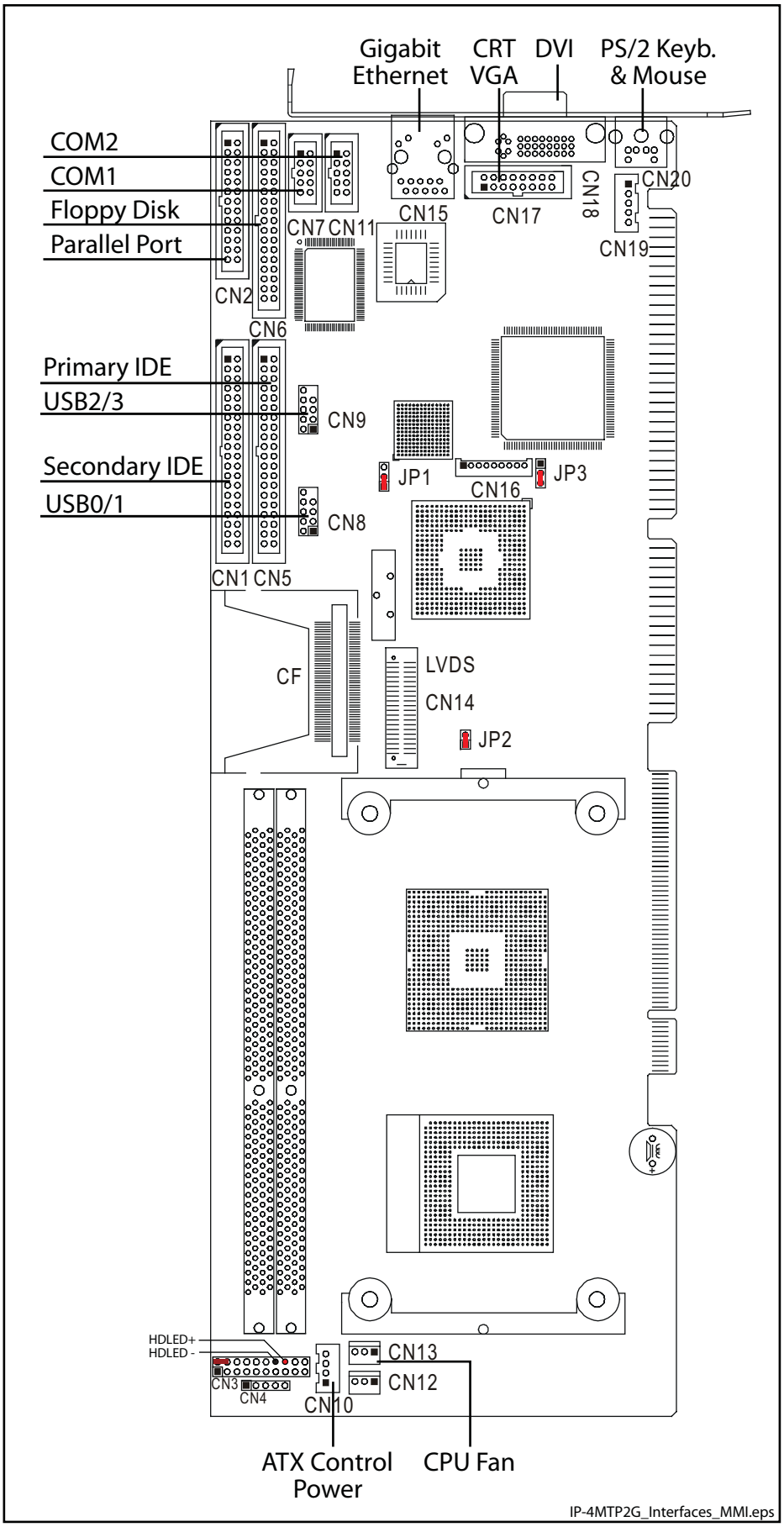
Die **IP-4MTP2G** Full-Size PICMG Slot-CPU-Karte wurde für Intel® Pentium® M und Celeron® M Prozessoren entwickelt und bietet neben einem Front Side Bus von 533/400 MHz und bis zu 2 GB DDR RAM ausreichend Performance für höchste Anforderungen. Weiterhin sind alle notwendigen Schnittstellen für die gesamte Peripherie vorhanden.

- On-Board LAN Controller → Gigabit Ethernet 10/100/1000, RJ-45
- On-Board Graphic Controller mit 64 MB (shared memory)
- On-Board I/O Controller für Mouse-, Tastatur-, Serial- und Parallel-Interface
- On-Board UDMA / IDE Controller
- 4 USB 2.0 Ports



Weitere Technische Daten sind im Anhang aus der Herstellerdokumentation zu entnehmen.

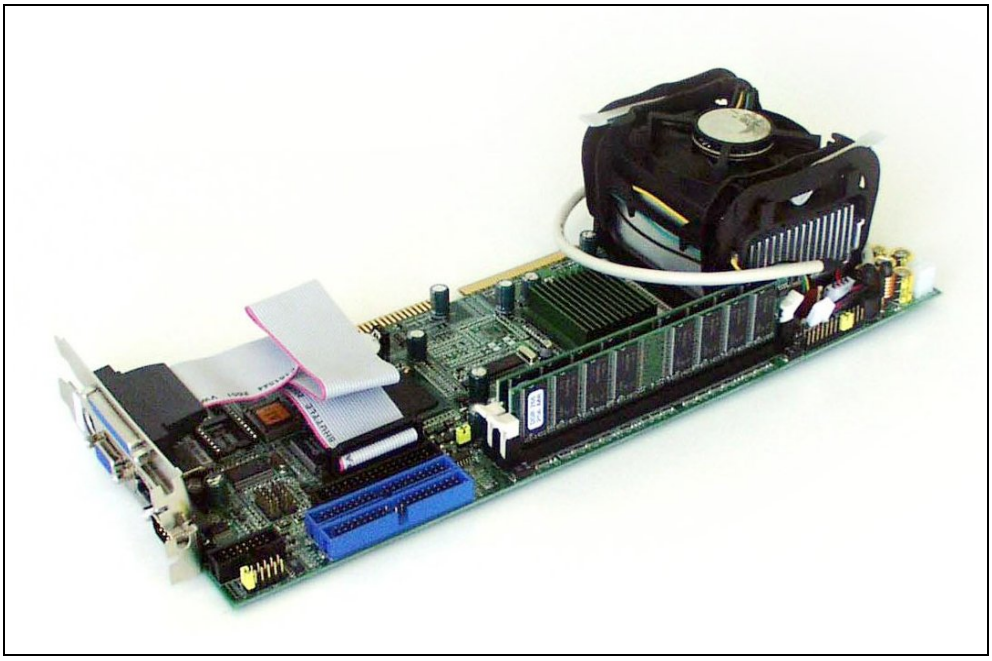
Schnittstellen der CPU



F845G/VE Full-Size Pentium® 4 CPU

Die **F845G/VE** Full-Size PICMG Slot-CPU-Karte wurde für Intel® Pentium®4 Prozessoren entwickelt und bietet neben einem Front Side Bus von 533/400 MHz und bis zu 2 GB DDR RAM ausreichend Performance für höchste Anforderungen. Weiterhin sind alle notwendigen Schnittstellen für die gesamte Peripherie vorhanden.

- On-Board LAN Controller → Ethernet 10/100, RJ-45
- On-Board VGA Controller mit 64 MB (shared memory)
- On-Board I/O Controller für Mouse-, Tastatur-, Serial- und Parallel-Interface
- On-Board UDMA / IDE Controller
- 4 USB 2.0 Ports

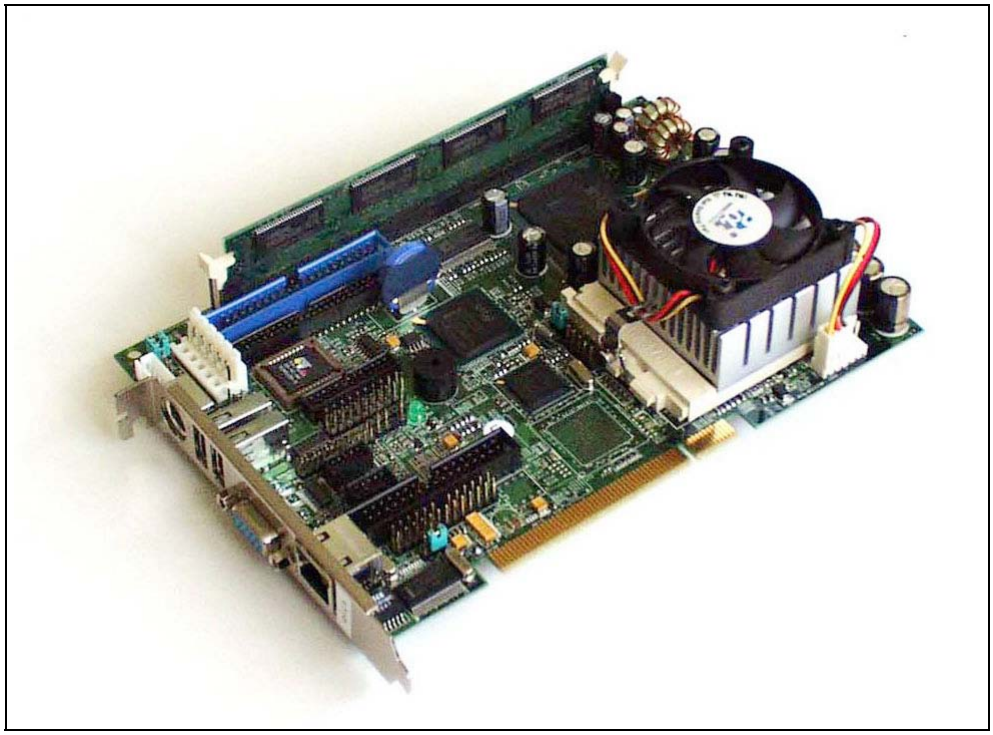


Weitere Technische Daten sind im Anhang aus der Herstellerdokumentation zu entnehmen.

CI-TSPE Half-Size Celeron® CPU

Die **CI-TSP** Half-Size PCI Slot-CPU-Karte wurde für Intel® Pentium®3 bzw. Celeron® Prozessoren entwickelt und besitzt einen Front Side Bus von 100/133 MHz. Der Speicher ist bis 512 MB SDRAM aufrüstbar. Weiterhin sind alle notwendigen Schnittstellen für die gesamte Peripherie vorhanden.

- On-Board LAN Controller → Ethernet 10/100, RJ-45
- On-Board VGA Controller mit 4 MB
- On-Board I/O Controller für Mouse-, Tastatur-, Serial- und Parallel-Interface
- On-Board UDMA / IDE Controller
- 4 USB 1.1 Ports



Weitere Technische Daten sind im Anhang aus der Herstellerdokumentation zu entnehmen.

Nummernschlüssel

+ C x x x x x x x

08.2011

CPU Type

M ..... HMI-CPU
N ..... NC-CPU
T ..... Transformation-CPU

CPU / BUS

1 ..... LEAD F845G/VE (P4 / PICMG fullsize)
2 ..... LEAD CI-TSPE (P3 / PCI halfsize)
3 ..... LEAD IP-4MTP2G (PM/ PICMG fullsize)
4 ..... LEAD EmCore-i6419VL (PM/ PCI halfsize)
5 ..... LEAD IPO-2040 (Core2Duo/ PCI fullsize)
6 ..... DSM 96m4211o (PM/ PICMG fullsize)
7 ..... DSM SHB210 (PICMG 1.3 halfsize)
8 ..... LEAD FS-97A (PICMG 1.3 fullsize)
9 ..... HS-7165 (PICMG 1.3 fullsize)

CPU Processor Frequence

1 ..... Intel® Celeron PPGA 733 MHz
2 ..... Intel® Celeron PPGA 1.2 GHz
3 ..... Intel® Pentium 4 2.4 GHz
4 ..... Intel® Celeron M 1.6 GHz
5 ..... Intel® Pentium M 1.8 GHz
6 ..... Intel® Core2Duo 2.66 GHz
7 ..... Intel® Celeron M 1.3 GHz
8 ..... Intel® Celeron M 575 1.73 GHz
9 ..... Intel® Core Duo T4400 2.2 GHz

CPU RAM

1 ..... 128 MB DIMM
2 ..... 256 MB DIMM
3 ..... 512 MB DIMM
4 ..... 256 MB DDR 266/333
5 ..... 512 MB DDR 266/333
6 ..... 1024 MB DDR 266/333
7 ..... 128 MB DDR 266/333
8 ..... 256 MB DDR 400 CL3 PC 3200U
9 ..... 256 MB DDR2 SO DIMM
A ..... 512 MB DDR2 SO DIMM
B ..... 1024 MB DDR2 SO DIMM
C ..... 2048 MB DDR2 SO DIMM

CPU Interfaces Onboard

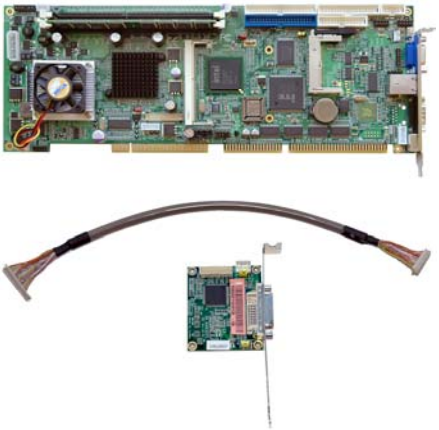
1 ..... 4x USB, VGA, COM, LPT, Ethernet
(Type IP-4MTP2G mit 3-fach Winkel / with triple bracket)
2 ..... 2x USB, VGA, COM, LPT, Ethernet
3 ..... 2x USB, VGA, COM, LPT, 2x Ethernet
4 ..... VGA, COM, LPT, Ethernet
5 ..... 4x USB, VGA, COM, LPT, Ethernet
6 ..... 4x USB, VGA, COM, DVI, Ethernet
7 ..... 4x USB, VGA, DVI, 2x Ethernet
8 ..... 2x (4x) USB, VGA/DVI, COM1/2, 2x Ethernet
9 ..... 2x (4x) USB, VGA/DVI, COM1-4, 2x Ethernet
A ..... 2x USB, COM1, Ethernet
(Type FS-97A, COM2/LPT1/HD LED on additional bracket, COM3/4 on additional interface card)
B ..... 4x USB, COM1, Ethernet
(Type FS-97A, COM2/LPT1/HD LED on additional bracket, DVI on extra DVI adapter card)
N ..... no interfaces

BIOS Versions

1 ..... V. 7.x (Typ CI-TSPE)
2 ..... V. 8.x (Typ F845G/VE)
3 ..... V. 10.x (Typ IP-4MTP2G) andronic 2060L/HMC600
4 ..... V. 9.x (Typ IP-4MTP2G) andronic 2000/HMC500
5 ..... V. 11.x (Typ EmCore-i6419VL)
6 ..... V. 12.x (Typ IP-4MTP2G) andronic 400/HMC400
7 ..... V. 13.x (Typ DSM 96m4211o / LEAD FS-97A)
8 ..... V. 14.x (Typ DSM SHB210) andronic 3060S
9 ..... V. 15.x (Typ HS-7165) andronic 3060L/HMC700

Abbildung: 8-stelliger CPU-Nummernschlüssel (andron Artikelnummer)

CPU und BIOS-Versionsübersicht

CPU	Ansicht	Bezeichnung	Schnittstellen	BIOS Version
HMI		**EmCore-i6419VL**	▪ VGA/DVI ▪ LAN ▪ USB 2.0 (1-4) ▪ IDE ▪ **COM1**	(V 11.0 D) **V 11.0.1**
			▪ VGA/DVI ▪ **2x LAN** ▪ USB 2.0 (1-4) ▪ IDE	(V 11.2 D) **V 11.2.1**
HMI		**CI-TSPE**	▪ VGA ▪ LAN ▪ USB 1.1 (1-2) ▪ IDE ▪ COM1 ▪ LPT1	**V 7.0D**
HMI		**IP-4MTP2G**	▪ VGA/DVI ▪ LAN ▪ USB 2.0 (1-4) ▪ IDE ▪ COM1/2 ▪ LPT1	**V 10.0D**
HMI		**F845G/VE**	▪ VGA ▪ LAN ▪ USB 2.0 (1-4) ▪ IDE ▪ COM1 ▪ LPT1	**V 8.0D**
HMI		**FS-97A**	▪ VGA ▪ LAN ▪ USB 2.0 ▪ IDE ▪ COM ▪ LPT ▪ DVI (ext. Adapter)	**V 13.2**

CPU	Ansicht	Bezeichnung	Schnittstellen	BIOS Version
NC		**EmCore-i6419VL**	ohne	**V 11.1 D**
NC		**CI-TSPE**	ohne	**V 7.1D**

BIOS 11.0 Default-Einstellungen

BIOS 11.0 HMI-CPU EmCore-i6419VL (mit VGA, LAN, USB, ...)

Anzeige im BIOS: 05/04/2006 V11.0 andron MMI-CPU +CM45525 (alte Version)
21/06/2007 V11.0 andron MMI-CPU +CM45525 (alte Version)
xx/03/2011 V11.0.1 andron MMI-CPU +CM45525

Phonix Award BIOS CMOS Setup Utility

Standard CMOS Features	PC Health Status
Advanced BIOS Features	Frequency / Voltage Control
Advanced Chipset Features	Load andron Defaults
Intergrated Peripherals	Set Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configurations	Exit Without Saving

Standard CMOS Features

Date (mm:dd:yy)	Actual date
Time (hh:mm:ss)	Actual time
IDE Primary Master	Auto
IDE Primary Slave	Auto
IDE Secondary Master	Auto
IDE Secondary Slave	Auto
Driva A:	None
Drive B:	None
Video	EGA/VGA
Halt On:	All, But Keyb
Base Memory	640K
Extended Memory	...K
Total Memory	...K

Advanced BIOS Features

CPU Feature	[Press Enter]
Virus Warning	Disabled
CPU L1 & L2 Cache	Enabled
CPU L3 Cache	Enabled
Quick Power On Self Test	Enabled
First Boot Device	HDD-0
Second Boot Device	Disabled
Third Boot Device	Disabled
Boot Other Device	Disabled
Swap Floppy Drive	Disabled
Boot Up Floppy Seek	Disabled
Boot Up NumLock Status	Off
Gate A20 Option	Fast
Typematic Rate Setting	Enabled
Typematic Rate (Chars/Sec)	12
Typematic Delay (Msec)	250
Security Option	Setup
APIC Mode	Disabled
MPS Version Control For OS 1.4	
OS Select For DRAM > 64MB	Non-OS2
Small Logo(EPA) Show	Enabled

CPU Feature

Thermal Management	Thermal Monitor 1
TM2 Bus Ratio	17 X
TM2 Bus VID	1.xxxV

Advanced Chipset Features

DRAM Timing Selectable	By SPD
CAS Latency Time	2.5
Active to Precharge Delay	7
DRAM RAS# to CAS# Delay	3
DRAM RAS# Precharge	3
DRAM Data Integrity Mode	Non-ECC
System BIOS Cacheable	Enabled
Video BIOS Cacheable	Disabled
Memory Hole At 15M-16M	Disabled
Delayed Transaction	Enabled
Delay Prior to Thermal	16 Min
AGP Aperture Size (MB)	64
** On-Chip VGA Setting **	
On-Chip VGA	Enabled
On-Chip Frame Buffer Size	32 MB
Boot Display	CRT+LFP
Panel Number	1024x768 24-bit

Integrated Peripherals

On-Chip IDE Device	[Press Enter]
Onboard Device	[Press Enter]
SuperIO Device	[Press Enter]

Submenu: On-Chip IDE Device

On-Chip Primary PCI IDE	Enabled
IDE Primary Master PIO	Auto
IDE Primary Slave PIO	Auto
IDE Primary Master UDMA	Auto
IDE Primary Slave UDMA	Auto
On-Chip Secondary PCI IDE	Enabled
IDE Secondary Master PIO	Auto
IDE Secondary Slave PIO	Auto
IDE Secondary Master UDMA	Auto
IDE Secondary Slave UDMA	Auto
IDE HDD Block Mode	Enabled

Submenu: Onboard Device

USB Controller	Enabled
USB 2.0 Controller	Enabled
USB Keyboard Support	Enabled
USB Mouse Support	Enabled
AC97 Audio	Disabled
Init Display First	Onboard/AGP
Onboard LAN1	Enabled
Onboard LAN2	Disabled

Submenu: SuperIO Device

Onboard FDC Controller	Enabled
Onboard Serial COM 1	3F8/IRQ4
Onboard Serial COM 2	2F8/IRQ3
UART Mode Select	Normal
RxD , TxD Active	Hi, Lo
IR Transmission Delay	Enabled
UR2 Duplex Mode	Half
Use IR Pins	IR-Rx2Tx2
Onboard Parallel Port	378/IRQ7
Parallel Port Mode	SPP
EPP Mode Select	EPP1.7
ECP Mode USE DMA	3
PWRON After PWR-Fail	On
Watch Dog Timer Select	Disabled

Power Management Setup

Power-Supply Type	AT
ACPI Function	Enabled
Power Management	User Define
Video Off Method	DPMS
Video Off IN Suspend	Yes
Suspend Type	Stop Grant
MODEM Use IRQ	NA
Suspend Mode	Disabled
HDD Power Down	Disabled
Soft-Off by PWR-BTTN	Instant-Off
Power-On by LAN	Disabled
Power-On by Ring	Disabled
Resume by Alarm	Disabled
Date(of Month) Alarm	0
Time(hh:mm:ss) Alarm	0 : 0 : 0
Reload Global Timer Events	
Primary IDE 0	Disabled
Primary IDE 1	Disabled
Secondary IDE 0	Disabled
Secondary IDE 1	Disabled
FDD, COM,LPT Port	Disabled
PCI PIRQ(A-D)#	Disabled

PNP/PCI Configurations

Reset Configuration Data	Disabled
Resources Controlled By	Auto(ESCD)
IRQ Resources	[Press Enter] → all PCI/ISA PnP
DMA Resources	[Press Enter] → all PCI/ISA PnP
PCI/VGA Palette Snoop	Disabled
PCI IRQ Actived By	Level

PC Health Status

Shutdown Temperature	65°C/149°F
CPU Temperature	
VCORE	
VTT	
+3.3V	
+ 5 V	
CPUFAN Speed	

Frequency / Voltage Control

Auto Detect PCI Clk	Enabled
Spread Spectrum	Disabled

BIOS 11.1 Default-Einstellungen

BIOS 11.1D NC-CPU EmCore-i6419VL (mit VGA, LAN, USB, ...)

Anzeige im BIOS: 10/04/2006 V11.1 andron NC-CPU +CN447N5 (alte Version)
21/06/2007 V11.1 andron NC-CPU +CN447N5

Phonix Award BIOS CMOS Setup Utility

Standard CMOS Features	PC Health Status
Advanced BIOS Features	Frequency / Voltage Control
Advanced Chipset Features	Load andron Defaults
Intergrated Peripherals	Set Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configurations	Exit Without Saving

Standard CMOS Features

Date (mm:dd:yy)	Actual date
Time (hh:mm:ss)	Actual time
IDE Primary Master	None
IDE Primary Slave	None
IDE Secondary Master	None
IDE Secondary Slave	None
Driva A:	None
Drive B:	None
Video	EGA/VGA
Halt On:	No Errors
Base Memory	640K
Extended Memory	...K
Total Memory	...K

Advanced BIOS Features

CPU Feature	[Press Enter]
Virus Warning	Disabled
CPU L1 & L2 Cache	Enabled
CPU L3 Cache	Enabled
Quick Power On Self Test	Enabled
First Boot Device	Disabled
Second Boot Device	Disabled
Third Boot Device	Disabled
Boot Other Device	Enabled
Swap Floppy Drive	Disabled
Boot Up Floppy Seek	Disabled
Boot Up NumLock Status	Off
Gate A20 Option	Fast
Typematic Rate Setting	Disabled
Typematic Rate (Chars/Sec)	6
Typematic Delay (Msec)	250
Security Option	Setup
APIC Mode	Disabled
MPS Version Control For OS 1.4	
OS Select For DRAM > 64MB	Non-OS2
Small Logo(EPA) Show	Enabled

CPU Feature

Thermal Management	Thermal Monitor 1
TM2 Bus Ratio	17 X
TM2 Bus VID	1.xxxV

Advanced Chipset Features

DRAM Timing Selectable	By SPD
CAS Latency Time	2.5
Active to Precharge Delay	7
DRAM RAS# to CAS# Delay	3
DRAM RAS# Precharge	3
DRAM Data Integrity Mode	Non-ECC
System BIOS Cacheable	Enabled
Video BIOS Cacheable	Disabled
Memory Hole At 15M-16M	Disabled
Delayed Transaction	Enabled
Delay Prior to Thermal	16 Min
AGP Aperture Size (MB)	4
** On-Chip VGA Setting **	
On-Chip VGA	Enabled
On-Chip Frame Buffer Size	1 MB
Boot Display	CRT+LFP
Panel Number	1024x768 18-bit

Integrated Peripherals

On-Chip IDE Device	[Press Enter]
Onboard Device	[Press Enter]
SuperIO Device	[Press Enter]

Submenu: On-Chip IDE Device

On-Chip Primary PCI IDE	Disabled
IDE Primary Master PIO	Auto
IDE Primary Slave PIO	Auto
IDE Primary Master UDMA	Auto
IDE Primary Slave UDMA	Auto
On-Chip Secondary PCI IDE	Disabled
IDE Secondary Master PIO	Auto
IDE Secondary Slave PIO	Auto
IDE Secondary Master UDMA	Auto
IDE Secondary Slave UDMA	Auto
IDE HDD Block Mode	Enabled

Submenu: Onboard Device

USB Controller	Disabled
USB 2.0 Controller	Disabled
USB Keyboard Support	Disabled
USB Mouse Support	Disabled
AC97 Audio	Disabled
Init Display First	PCI Slot
Onboard LAN1	Disabled
Onboard LAN2	Disabled

Submenu: SuperIO Device

Onboard FDC Controller	Disabled
Onboard Serial COM 1	Disabled
Onboard Serial COM 2	Disabled
UART Mode Select	Normal
RxD , TxD Active	Hi, Lo
IR Transmission Delay	Enabled
UR2 Duplex Mode	Half
Use IR Pins	IR-Rx2Tx2
Onboard Parallel Port	Disabled
Parallel Port Mode	SPP
EPP Mode Select	EPP1.7
ECP Mode USE DMA	3
PWRON After PWR-Fail	On
Watch Dog Timer Select	Disabled

Power Management Setup

Power-Supply Type	AT
ACPI Function	Enabled
Power Management	User Define
Video Off Method	DPMS
Video Off IN Suspend	Yes
Suspend Type	Stop Grant
MODEM Use IRQ	NA
Suspend Mode	Disabled
HDD Power Down	Disabled
Soft-Off by PWR-BTTN	Instant-Off
Power-On by LAN	Disabled
Power-On by Ring	Disabled
Resume by Alarm	Disabled
Date(of Month) Alarm	0
Time(hh:mm:ss) Alarm	0 : 0 : 0
Reload Global Timer Events	
Primary IDE 0	Disabled
Primary IDE 1	Disabled
Secondary IDE 0	Disabled
Secondary IDE 1	Disabled
FDD, COM,LPT Port	Disabled
PCI PIRQ(A-D)#	Disabled

PNP/PCI Configurations

Reset Configuration Data	Disabled
Resources Controlled By	Auto(ESCD)
IRQ Resources	[Press Enter] → all PCI/ISA PnP
DMA Resources	[Press Enter] → all PCI/ISA PnP
PCI/VGA Palette Snoop	Disabled
PCI IRQ Actived By	Level

PC Health Status

Shutdown Temperature	65°C/149°F
CPU Temperature	
VCORE	
VTT	
+3.3V	
+ 5 V	
CPUFAN Speed	

Frequency / Voltage Control

Auto Detect PCI Clk	Enabled
Spread Spectrum	Disabled

BIOS 11.2 Default-Einstellungen

BIOS 11.2 HMI-CPU EmCore-i6419VL (mit VGA, 2x LAN, USB, ...)

Anzeige im BIOS: 29/10/2007 V11.2 andron MMI-CPU +CM44475
xx/xx/2011 V11.2.1 andron MMI-CPU +CM44475

Phonix Award BIOS CMOS Setup Utility

Standard CMOS Features	PC Health Status
Advanced BIOS Features	Frequency / Voltage Control
Advanced Chipset Features	Load andron Defaults
Intergrated Peripherals	Set Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configurations	Exit Without Saving

Standard CMOS Features

Date (mm:dd:yy)	Actual date
Time (hh:mm:ss)	Actual time
IDE Primary Master	Auto
IDE Primary Slave	Auto
IDE Secondary Master	Auto
IDE Secondary Slave	Auto
Driva A:	None
Drive B:	None
Video	EGA/VGA
Halt On:	All, But Keyb
Base Memory	640K
Extended Memory	...K
Total Memory	...K

Advanced BIOS Features

CPU Feature	[Press Enter]
Virus Warning	Disabled
CPU L1 & L2 Cache	Enabled
CPU L3 Cache	Enabled
Quick Power On Self Test	Enabled
First Boot Device	HDD-0
Second Boot Device	Disabled
Third Boot Device	Disabled
Boot Other Device	Disabled
Swap Floppy Drive	Disabled
Boot Up Floppy Seek	Disabled
Boot Up NumLock Status	Off
Gate A20 Option	Fast
Typematic Rate Setting	Enabled
Typematic Rate (Chars/Sec)	12
Typematic Delay (Msec)	250
Security Option	Setup
APIC Mode	Enabled
MPS Version Control For OS 1.4	
OS Select For DRAM > 64MB	Non-OS2
Small Logo(EPA) Show	Enabled

CPU Feature

Thermal Management	Thermal Monitor 1
TM2 Bus Ratio	17 X
TM2 Bus VID	1.xxxV

Advanced Chipset Features

DRAM Timing Selectable	By SPD
CAS Latency Time	2.5
Active to Precharge Delay	7
DRAM RAS# to CAS# Delay	3
DRAM RAS# Precharge	3
DRAM Data Integrity Mode	Non-ECC
System BIOS Cacheable	Enabled
Video BIOS Cacheable	Disabled
Memory Hole At 15M-16M	Disabled
Delayed Transaction	Enabled
Delay Prior to Thermal	16 Min
AGP Aperture Size (MB)	64
** On-Chip VGA Setting **	
On-Chip VGA	Enabled
On-Chip Frame Buffer Size	32 MB
Boot Display	CRT+LFP
Panel Number	1024x768 24-bit

Integrated Peripherals

On-Chip IDE Device	[Press Enter]
Onboard Device	[Press Enter]
SuperIO Device	[Press Enter]

Submenu: On-Chip IDE Device

On-Chip Primary PCI IDE	Enabled
IDE Primary Master PIO	Auto
IDE Primary Slave PIO	Auto
IDE Primary Master UDMA	Auto
IDE Primary Slave UDMA	Auto
On-Chip Secondary PCI IDE	Enabled
IDE Secondary Master PIO	Auto
IDE Secondary Slave PIO	Auto
IDE Secondary Master UDMA	Auto
IDE Secondary Slave UDMA	Auto
IDE HDD Block Mode	Enabled

Submenu: Onboard Device

USB Controller	Enabled
USB 2.0 Controller	Enabled
USB Keyboard Support	Enabled
USB Mouse Support	Enabled
AC97 Audio	Disabled
Init Display First	Onboard/AGP
Onboard LAN1	Enabled
Onboard LAN2	Enabled

Submenu: SuperIO Device

Onboard FDC Controller	Enabled
Onboard Serial COM 1	3F8/IRQ4
Onboard Serial COM 2	2F8/IRQ3
UART Mode Select	Normal
RxD , TxD Active	Hi, Lo
IR Transmission Delay	Enabled
UR2 Duplex Mode	Half
Use IR Pins	IR-Rx2Tx2
Onboard Parallel Port	378/IRQ7
Parallel Port Mode	SPP
EPP Mode Select	EPP1.7
ECP Mode USE DMA	3
PWRON After PWR-Fail	Off
Watch Dog Timer Select	Disabled

Power Management Setup

Power-Supply Type	ATX
ACPI Function	Enabled
Power Management	User Define
Video Off Method	DPMS
Video Off IN Suspend	Yes
Suspend Type	Stop Grant
MODEM Use IRQ	NA
Suspend Mode	Disabled
HDD Power Down	Disabled
Soft-Off by PWR-BTTN	Instant-Off
Power-On by LAN	Disabled
Power-On by Ring	Disabled
Resume by Alarm	Disabled
Date(of Month) Alarm	0
Time(hh:mm:ss) Alarm	0 : 0 : 0
Reload Global Timer Events	
Primary IDE 0	Disabled
Primary IDE 1	Disabled
Secondary IDE 0	Disabled
Secondary IDE 1	Disabled
FDD, COM,LPT Port	Disabled
PCI PIRQ(A-D)#	Disabled

PNP/PCI Configurations

Reset Configuration Data	Disabled
Resources Controlled By	Auto(ESCD)
IRQ Resources	[Press Enter] → all PCI/ISA PnP
DMA Resources	[Press Enter] → all PCI/ISA PnP
PCI/VGA Palette Snoop	Disabled
PCI IRQ Actived By	Level

PC Health Status

Shutdown Temperature	65°C/149°F
CPU Temperature	
VCORE	
VTT	
+3.3V	
+ 5 V	
CPUFAN Speed	

Frequency / Voltage Control

Auto Detect PCI Clk	Enabled
Spread Spectrum	Disabled

BIOS 10.0 Default-Einstellungen

BIOS 10.0D HMI-CPU IP-4MTP2G (mit VGA, LAN, USB, ...)

Anzeige im BIOS:

07/02/2006 V10.0 andron MMI-CPU +CM35613 i855 Series (erste Version)
10/05/2006 V10.0 andron MMI-CPU +CM35613 i855 Series (zweite Version)
02/20/2008 V10.0 andron MMI-CPU +CM35613 i855 Series

Bei Problemen mit F1-Bestätigungen in der Bootphase (durch geändertes Bootlaufwerk, z.B. USB-Stick) bitte aktuellste BIOS Version einspielen, dort wurde die F1 Nachfrage entfernt.

Phonix Award BIOS CMOS Setup Utility

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load andron Defaults
Advanced Chipset Features	Load Optimized Defaults
Intergrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PNP/PCI Configurations	Save & Exit Setup
PC Health Status	Exit Without Saving

Standard CMOS Features

Date (mm:dd:yy)	Actual date
Time (hh:mm:ss)	Actual time
IDE Primary Master	Auto
IDE Primary Slave	Auto
IDE Secondary Master	Auto
IDE Secondary Slave	Auto
Driva A:	None
Drive B:	None
Video	EGA/VGA
Halt On:	All, But Keyb
Base Memory	640K
Extended Memory	...K
Total Memory	...K

Advanced BIOS Features

CPU Feature	[Press Enter]
Hard Disk Boot Priority	[Press Enter]
Virus Warning	Disabled
CPU L1 & L2 Cache	Enabled
Quick Power On Self Test	Enabled
USB Flash Disk Type	Floppy
First Boot Device	USB-ZIP
Second Boot Device	USB-CDROM
Third Boot Device	Hard Disk
Boot Other Device	Enabled
Swap Floppy Drive	Disabled
Boot Up Floppy Seek	Disabled
Boot Up NumLock Status	Off
Gate A20 Option	Fast
Security Option	Setup
APIC Mode	Enabled

Advanced Chipset Features

DRAM Timing Selectable	By SPD
CAS Latency Time	2.5
Active to Precharge Delay	6
DRAM RAS# to CAS# Delay	3
DRAM RAS# Precharge	3
DRAM Data Integrity Mode	Non-ECC
MGM Core Frequency	Auto Max 266
System BIOS Cacheable	Enabled
Video BIOS Cacheable	Disabled
Memory Hole At 15M-16M	Disabled
Delayed Transaction	Enabled
Delay Prior to Thermal	16 Min
AGP Aperture Size (MB)	256MB
** On-Chip VGA Setting **	
On-Chip VGA	Enabled
On-Chip Frame Buffer Size	32 MB
Boot Display	CRT-ONLY
Panel Number	2

Integrated Peripherals

On-Chip IDE Device	[Press Enter]
Onboard Device	[Press Enter]
SuperIO Device	[Press Enter]
Onboard Lan Boot ROM	Disabled

Submenu: On-Chip IDE Device

On-Chip Primary PCI IDE	Enabled
IDE Primary Master PIO	Auto
IDE Primary Slave PIO	Auto
IDE Primary Master UDMA	Auto
IDE Primary Slave UDMA	Auto
On-Chip Secondary PCI IDE	Enabled
IDE Secondary Master PIO	Auto
IDE Secondary Slave PIO	Auto
IDE Secondary Master UDMA	Auto
IDE Secondary Slave UDMA	Auto
IDE HDD Block Mode	Enabled

Submenu: Onboard Device

USB Controller	Enabled
USB 2.0 Controller	Enabled
USB Keyboard Support	Enabled
USB Mouse Support	Enabled
Onboard LAN device	Enabled
Init Display First	Onboard

Submenu: SuperIO Device

POWER ON Function	BUTTON ONLY
Hot Key Power ON	Ctrl-F1
Onboard FDC Controller	Enabled
Onboard Serial COM 1	3F8/IRQ4
Onboard Serial COM 2	2F8/IRQ3
UART Mode Select	Normal
RxD , TxD Active	Hi, Lo
IR Transmission Delay	Enabled
UR2 Duplex Mode	Half
Use IR Pins	IR-Rx2Tx2
Onboard Parallel Port	378/IRQ7
Parallel Port Mode	SPP
EPP Mode Select	EPP1.7
ECP Mode USE DMA	3
PWRON After PWR-Fail	On

Power Management Setup

ACPI Function	Enabled
Power Management	User Define
Video Off Method	DPMS
Video Off IN Suspend	Yes
Suspend Type	Stop Grant
Suspend Mode	Disabled
HDD Power Down	Disabled
CPU THRM-Throttling	50,0%
Wake-Up by PCI card	Disabled
Reload Global Timer Events	
Primary IDE 0	Disabled
Primary IDE 1	Disabled
Secondary IDE 0	Disabled
Secondary IDE 1	Disabled
FDD, COM,LPT Port	Disabled
PCI PIRQ(A-D)#	Disabled

PNP/PCI Configurations

PNP OS Installed	Yes
Reset Configuration Data	Disabled
Resources Controlled By	Auto(ESCD)
IRQ Resources	[Press Enter] → all PCI/ISA PnP
DMA Resources	[Press Enter] → all PCI/ISA PnP
PCI/VGA Palette Snoop	Disabled

PC Health Status

CPU Warning Temperature	66°C/151°F
SYS Temperature	
CPU Temperature	
SYSFAN	
COUFAN	
VDIMM	
VCORE	
+3.3V	
+ 5 V	
+12 V	
-12 V	
- 5 V	
VBAT	
5VSB	
Shutdown Temperature	75°C/167°F

Frequency / Voltage Control

Spread Spectrum	Disabled

BIOS 8.0 Default-Einstellungen

BIOS 8.0D HMI-CPU F845G/VE (mit VGA, LAN, USB, ...)

Anzeige im BIOS: 10/06/2003 andron V8.0D for HMI / Stand 21.03.2003

Phonix Award BIOS CMOS Setup Utility

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load andron Defaults
Advanced Chipset Features	Load Optimized Defaults
Intergrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PNP/PCI Configurations	Save & Exit Setup
PC Health Status	Exit Without Saving

Standard CMOS Features

Date (mm:dd:yy)	Tue, Nov 12 2002
Time (hh:mm:ss)	13 : 53: 39
IDE Primary Master	None
IDE Primary Slave	
IDE Secondary Master	
IDE Secondary Slave	
Driva A:	None
Drive B:	None
Video	EGA/VGA
Halt On:	All, But Keyb
Base Memory	640K
Extended Memory	515072K
Total Memory	516096K

Advanced BIOS Features

Virus Warning	Disabled
CPU L1 & L2 Cache	Enabled
Quick Power On Self Test	Enabled
First Boot Device	USB-ZIP
Second Boot Device	HDD-0
Third Boot Device	Disabled
Boot Other Device	Enabled
Swap Floppy Drive	Disabled
Boot Up Floppy Seek	Disabled
Boot Up NumLock Status	Off
Gate A20 Option	Fast
Typematic Rate Setting	Enabled
Typematic Rate (Chars/Sec)	12
Typematic Delay (msec)	250
Security Option	Setup
APIC Mode	Enabled
MPS Version Control For OS	1.4
OS Select For DRAM > 64MB	Non-OS2
Report No FDD For WIN95	No

Advanced Chipset Features

DRAM Timing Selectable	By SPD
X CAS Latency Time	2.5
X Active Precharge Delay	6
X DRAM RAS# to CAS# Delay	3
X DRAM RAS# Precharge	3
Turbo Mode	Disabled
Memory Frequency For	Auto
System BIOS Cacheable	Enabled
Video BIOS Cacheable	Disabled
Memory Hole At 15M-16M	Disabled
Delayed Transaction	Enabled
Delay Priorto Thermal	16 Min
AGP Aperture Size (MB)	64MB
** On-Chip VGA Setting **	
On-Chip VGA	Enabled
On-Chip Frame Buffer Size	8 MB
Disk On Chip Adress	D8000H-DBFFFH

Integrated Peripherals

On-Chip Primary PCI IDE	Enabled
IDE Primary Master PIO	Auto
IDE Primary Slave PIO	Auto
IDE Primary Master UDMA	Auto
IDE Primary Slave UDMA	Auto
On-Chip Secondary PCI IDE	Enabled
IDE Secondary Master PIO	Auto
IDE Secondary Slave PIO	Auto
IDE Secondary Master UDMA	Auto
IDE Secondary Slave UDMA	Auto
USB Controller	Enabled
USB 2.0 Controller	Enabled
USB Keyboard Support	Enabled
USB Mouse Support	Enabled
AC97 Audio	Disabled
Init Display First	Onboard
IDE HDD Block Mode	Enabled
Onboard Lan Boot ROM	Disabled
Onboard FDC Controller	Enabled
Onboard Serial Port 1	3F8/IRQ4
Onboard Serial Port 2	2F8/IRQ3
UART Mode Select	Normal
X RXD , TXD Active	Hi, Lo
X IR Transmission Delay	Enabled
X UR2 Duplex Mode	Half
X USE IR Pins	IR-Rx2Tx2
Onboard Parallel Port	378/IRQ7
Parallel Port Mode	SPP
X EPP Mode Select	EPP1.7
X ECP Mode USE DMA	3
PWRON After PWR-Fail	on

Power Management Setup

ACPI Function	Enabled
Power Management	User Define
Video Off Method	DPMS
Video Off IN Suspend	Yes
Suspend Type	Stop Grant
Modem Use IRQ	NA
Suspend Mode	Disabled
HDD Power Down	Disabled
Soft-Off by PWR-BTTN	Delay 4 sec.
CPU Thermal-Throttling	50,0%
Wake-Up by PCI card	Disabled
PowerOn by Ring	Disabled
Resume by Alarm	Disabled
X Date (of Month) Alarm	0
X Time (hh:mm:ss) Alarm	0 : 0 : 0
Reload Global Timer Events	
Primary IDE 0	Disabled
Primary IDE 1	Disabled
Secondary IDE 0	Disabled
Secondary IDE 1	Disabled
FDD, COM,LPT Port	Disabled
PCI PIRQ(A-D)#	Disabled

PNP/PCI Configurations

Reset Configuration Data	Disabled
Resources Controlled By	Auto (ESCD)
X IRQ Resources	Press Enter
PCI/VGA Palette Snoop	Disabled

PC Health Status

CPU Warning Temperature	70°C / 158°F
Current System Temp	
Current CPU1 Temperature	
Current CPU FAN Speed	
Current Chassis FAN Speed	
VDIMM(V)	
Vcore (V)	
VCC 3.3(V)	
+ 5 V	
+12 V	
-12 V	
- 5 V	
VBAT(V)	
5VSB(V)	
Shutdown Temperature	75°C / 167°F

Frequency / Voltage Control

Auto Detect PCI CLK	Enabled
Spread Spectrum	Disabled

BIOS 13.2 Default-Einstellungen

BIOS 13.2 HMI-CPU FS-97A (mit VGA, LAN, USB, ...)

Anzeige: FS-97A VER:2.3 andron GmbH V13.2

Phonix Award BIOS CMOS Setup Utility

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Fail-Safe Defaults
Advanced Chipset Features	Load andron Defaults
Intergrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PNP/PCI Configurations	Save & Exit Setup
PC Health Status	Exit Without Saving

Standard CMOS Features

Date (mm:dd:yy)	Wed, Aug 31 2011
Time (hh:mm:ss)	13 : 53: 39
IDE Primary Master	None
IDE Primary Slave	None
IDE Secondary Master	None
IDE Secondary Slave	None
Driva A:	1.44M, 3.5 in.
Drive B:	None
Video	EGA/VGA
Halt On:	All, But Keyboard
Base Memory	640K
Extended Memory	1013760K
Total Memory	1014784K

Advanced BIOS Features

Virus Warning	Disabled
CPU L1 & L2 Cache	Enabled
Quick Power On Self Test	Enabled
First Boot Device	HDD-0
Second Boot Device	Disabled
Third Boot Device	Disabled
Boot Other Device	Disabled
Swap Floppy Drive	Disabled
Boot Up Floppy Seek	Disabled
Boot Up NumLock Status	Off
Gate A20 Option	Fast
Typematic Rate Setting	Enabled
Typematic Rate (Chars/Sec)	15
Typematic Delay (msec)	250
Security Option	Setup
APIC Mode	Enabled
MPS Version Control For OS	1.4
OS Select For DRAM > 64MB	Non-OS2
Report No FDD For WIN95	No

Advanced Chipset Features

DRAM Timing Selectable	By SPD
X CAS Latency Time	2.5
X Active Precharge Delay	6
X DRAM RAS# to CAS# Delay	3
X DRAM RAS# Precharge	3
DRAM Data Integrity Mode	Non-ECC
System BIOS Cacheable	Enabled
Video BIOS Cacheable	Disabled
Memory Hole At 15M-16M	Disabled
Delayed Transaction	Enabled
Delay Prior to Thermal	16 Min
AGP Aperture Size (MB)	256
** On-Chip VGA Setting **	
On-Chip VGA	Enabled
On-Chip Frame Buffer Size	32 MB
Boot Display	AUTO
Panel Number	3
TV Standard	PAL

Integrated Peripherals

On-Chip Primary PCI IDE	Enabled
IDE Primary Master PIO	Auto
IDE Primary Slave PIO	Auto
IDE Primary Master UDMA	Auto
IDE Primary Slave UDMA	Auto
On-Chip Secondary PCI IDE	Enabled
IDE Secondary Master PIO	Auto
IDE Secondary Slave PIO	Auto
IDE Secondary Master UDMA	Auto
IDE Secondary Slave UDMA	Auto
USB Controller	Enabled
USB 2.0 Controller	Enabled
USB Keyboard Support	Enabled
USB Mouse Support	Enabled
AC97 Audio	Auto
Init Display First	Onboard/AGP
POWER ON Function	BUTTON ONLY
Onboard FDC Controller	Enabled
Onboard Serial Port 1	3F8/IRQ4
Onboard Serial Port 2	2F8/IRQ3
UART Mode Select	Normal
x RXD , TXD Active	Hi, Lo
x IR Transmission Delay	Enabled
x UR2 Duplex Mode	Half
x USE IR Pins	IR-Rx2Tx2
Onboard Parallel Port	378/IRQ7
Parallel Port Mode	SPP
x EPP Mode Select	EPP1.7
x ECP Mode USE DMA	3
PWRON After PWR-Fail	On
Game Port Address	Disabled
Midi Port Address	Disabled

Power Management Setup

ACPI Function	Enabled
ACPI Suspend Type	S1(POS)
Power Management	User Define
Video Off Method	V/H SYNC+Blank
Video Off IN Suspend	Yes
Suspend Type	Stop Grant
Modem Use IRQ	NA
Suspend Mode	Disabled
HDD Power Down	Disabled
Soft-Off by PWR-BTTN	Instant-Off
CPU Thermal-Throttling	50,0%
Wake-Up by PCI card	Disabled
Power On by Ring	Disabled
Wake up on LAN	Disabled
Resume by Alarm	Disabled
Reload Global Timer Events	
Primary IDE 0	Disabled
Primary IDE 1	Disabled
Secondary IDE 0	Disabled
Secondary IDE 1	Disabled
FDD, COM,LPT Port	Disabled
PCI PIRQ(A-D)#	Disabled

PNP/PCI Configurations

PNP OS Installed	Yes
Reset Configuration Data	Disabled
Resources Controlled By	Auto (ESCD)
X IRQ Resources	Press Enter
PCI/VGA Palette Snoop	Disabled

PC Health Status

CPU Warning Temperature	Disabled
Current System Temp	
Current CPU1 Temperature	
Current CPU FAN Speed	
Current Chassis FAN Speed	
VDIMM(V)	
Vcore (V)	
VCC 3.3(V)	
+ 5 V	
+12 V	
-12 V	
- 5 V	
VBAT(V)	
5VSB(V)	
Shutdown Temperature	Disabled

Frequency / Voltage Control

Auto Detect PCI CLK	Enabled
Spread Spectrum	Disabled
CPU Host/3V66/PCI Clock	Default

BIOS 7.0 Default-Einstellungen

BIOS 7.0D HMI-CPU CITSPE (mit VGA, LAN, USB, ...)

Anzeige im BIOS: 17/06/2003 andron V7.0D for HMI / Stand 21.03.2003

Phonix Award BIOS CMOS Setup Utility

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load andron Defaults
Advanced Chipset Features	Load Optimized Defaults
Intergrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PNP/PCI Configurations	Save & Exit Setup
PC Health Status	Exit Without Saving

Standard CMOS Features

Date (mm:dd:yy)	Tue, Nov 12 2002
Time (hh:mm:ss)	13 : 53: 39
IDE Primary Master	None
IDE Primary Slave	
IDE Secondary Master	
IDE Secondary Slave	
Driva A:	None
Drive B:	None
Video	EGA/VGA
Halt On:	All, But Keyboard
Base Memory	640K
Extended Memory	129024K
Total Memory	130048K

Advanced BIOS Features

Virus Warning	Disabled
CPU Internal Cache	Enabled
External Cache	Enabled
CPU L2 Cache ECC Checking	Enabled
Processor Number Feature	Enabeld
Quick Power On Self Test	Enabled
First Boot Device	USB-ZIP
Second Boot Device	HDD-0
Third Boot Device	Disabled
Boot Other Device	Enabled
Swap Floppy Drive	Disabled
Boot Up Floppy Seek	Disabled
Boot Up NumLock Status	Off
Gate A20 Option	Fast
Typematic Rate Setting	Enabled
Typematic Rate (Chars/Sec)	12
Typematic Delay (msec)	250
Security Option	Setup
OS Select For DRAM > 64MB	Non-OS2
Report No FDD For WIN95	No
Video BIOS Shadow	Disabled
C8000-CBFFF Shadow	Disabled
CC000-CFFFF Shadow	Disabled
D0000-D3FFF Shadow	Disabled
D4000-D7FFF Shadow	Disabled
D8000-DBFFF Shadow	Disabled
DC000-DFFFF Shadow	Disabled
Small Logo(EPA) Show	Disabled

Advanced Chipset Features

SDRAM CAS Latency Time	2
SDRAM Cycle Time Tras/Trc	Auto
SDRAM RAS-to-CAS Delay	Auto
SDRAM RAS Precharge Time	Auto
System BIOS Cacheable	Enabled
Video BIOS Cacheable	Enabled
CPU Latency Timer	Enabled
Delayed Transaction	Enabled
AGP Graphics Aperture Size	64MB
Power-Supply Type	AT
On-Chip Video Window Size	64MB

Integrated Peripherals

On-Chip Primary PCI IDE	Enabled
On-Chip Secondary PCI IDE	Disabled
IDE Primary Master PIO	Auto
IDE Primary Slave PIO	Auto
IDE Secondary Master PIO	Auto
IDE Secondary Slave PIO	Auto
IDE Primary Master UDMA	Auto
IDE Primary Slave UDMA	Auto
IDE Secondary Master UDMA	Auto
IDE Secondary Slave UDMA	Auto
USB Controller	Enabled
USB Keyboard Support	Disabled
USB Mouse Support	Enabled
Init Display First	Onboard / AGP
AC97 Audio	Disabled
IDE HDD Block Mode	Enabled
Onboard FDC Controller	Enabled
Onboard Serial Port 1	3F8/IRQ4
Onboard Serial Port 2	Disabled
UART Mode Select	Normal
RXD , TXD Active	Hi, Lo
IR Transmission Delay	Enabled
UR2 Duplex Mode	Half
USE IR Pins	IR-Rx2Tx2
Onboard Parallel Port	378/IRQ7
Parallel Port Mode	SPP
EPP Mode Select	EPP1.7
ECP Mode USE DMA	3
Game Port Address	Disabled
Midi Port Address	Disabled
Midi Port IRQ	10

Power Management Setup

ACPI Function	Enabled
ACPI Suspend Type	S1(POS)
Run VGABIOS if S3 Resume	Auto
Power Management	User Define
Video Off Method	DPMS
Video Off IN Suspend	Yes
Suspend Type	Stop Grant
Modem Use IRQ	NA
Suspend Mode	Disabled
HDD Power Down	Disabled
Soft-Off by PWR-BTTN	Delay 4 sec.
PowerOn by Ring	Disabled
USB KB Wake-Up From S3	Disabled
CPU Thermal-Throttling	50,0%
Resume by Alarm	Disabled
X Date (of Month) Alarm	0
X Time (hh:mm:ss) Alarm	0 : 0 : 0
Reload Global Timer Events	
Primary IDE 0	Disabled
Primary IDE 1	Disabled
Secondary IDE 0	Disabled
Secondary IDE 1	Disabled
FDD, COM,LPT Port	Disabled
PCI PIRQ(A-D)#	Disabled

PNP/PCI Configurations

PNP OS Installed	Yes
Reset Configuration Data	Disabled
Resources Controlled By	Auto (ESCD)
X IRQ Resources	Press Enter
PCI/VGA Palette Snoop	Disabled

PC Health Status

CPU Warning Temperature	70°C / 158°F
Current System Temp	
Current CPU1 Temperature	
Current CPUFAN1 Speed	
Current CPUFAN2 Speed	
IN0(V)	
IN1(V)	
IN2(V)	
+ 5 V	
+12 V	
-12 V	
- 5 V	
VBAT(V)	
5VSB(V)	

Frequency / Voltage Control

Auto Detect DIMM/PCI CLK	Enabled
Spread Spectrum	Disabled
CPU HOST/PCI Clock/PC133	Default
CPU Clock Ratio	X 11

BIOS 7.1 Default-Einstellungen

BIOS 7.1D NC-CPU CITSPE (ohne Schnittstellen)

Anzeige im BIOS: 07/07/2003 andron V7.1D for NC / Stand 07.07.2003

Phonix Award BIOS CMOS Setup Utility

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load andron Defaults
Advanced Chipset Features	Load Optimized Defaults
Intergrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PNP/PCI Configurations	Save & Exit Setup
PC Health Status	Exit Without Saving

Standard CMOS Features

Date (mm:dd:yy)	Tue, Nov 12 2002
Time (hh:mm:ss)	13 : 53: 39
IDE Primary Master	None
IDE Primary Slave	None
IDE Secondary Master	None
IDE Secondary Slave	None
Driva A:	None
Drive B:	None
Video	EGA/VGA
Halt On:	No Errors
Base Memory	640K
Extended Memory	129024K
Total Memory	130048K

Advanced BIOS Features

Virus Warning	Disabled
CPU Internal Cache	Enabled
External Cache	Enabled
CPU L2 Cache ECC Checking	Enabled
Quick Power On Self Test	Enabled
First Boot Device	Disabled
Second Boot Device	Disabled
Third Boot Device	Disabled
Boot Other Device	Enabled
Swap Floppy Drive	Disabled
Boot Up Floppy Seek	Disabled
Boot Up NumLock Status	Off
Gate A20 Option	Fast
Typematic Rate Setting	Enabled
Typematic Rate (Chars/Sec)	12
Typematic Delay (msec)	250
Security Option	Setup
OS Select For DRAM > 64MB	Non-OS2
Report No FDD For WIN95	No
Video BIOS Shadow	Disabled
C8000-CBFFF Shadow	Disabled
CC000-CFFFF Shadow	Disabled
D0000-D3FFF Shadow	Disabled
D4000-D7FFF Shadow	Disabled
D8000-DBFFF Shadow	Disabled
DC000-DFFFF Shadow	Disabled
Small Logo(EPA) Show	Disabled

Advanced Chipset Features

SDRAM CAS Latency Time	2
SDRAM Cycle Time Tras/Trc	Auto
SDRAM RAS-to-CAS Delay	Auto
SDRAM RAS Precharge Time	Auto
System BIOS Cacheable	Enabled
Video BIOS Cacheable	Enabled
CPU Latency Timer	Enabled
Delayed Transaction	Enabled
AGP Graphics Aperture Size	64MB
Power-Supply Type	AT
On-Chip Video Window Size	64MB

Integrated Peripherals

On-Chip Primary PCI IDE	Disabled
On-Chip Secondary PCI IDE	Disabled
IDE Primary Master PIO	Auto
IDE Primary Slave PIO	Auto
IDE Secondary Master PIO	Auto
IDE Secondary Slave PIO	Auto
IDE Primary Master UDMA	Auto
IDE Primary Slave UDMA	Auto
IDE Secondary Master UDMA	Auto
IDE Secondary Slave UDMA	Auto
USB Controller	Disabled
USB Keyboard Support	Disabled
USB Mouse Support	Disabled
Init Display First	PCI Slot
AC97 Audio	Disabled
IDE HDD Block Mode	Enabled
Onboard FDC Controller	Disabled
Onboard Serial Port 1	Disabled
Onboard Serial Port 2	Disabled
UART Mode Select	Normal
RXD , TXD Active	Hi, Lo
IR Transmission Delay	Enabled
UR2 Duplex Mode	Half
USE IR Pins	IR-Rx2Tx2
Onboard Parallel Port	Disabled
Parallel Port Mode	SPP
EPP Mode Select	EPP1.7
ECP Mode USE DMA	3
Game Port Address	Disabled
Midi Port Address	Disabled
Midi Port IRQ	10

Power Management Setup

ACPI Function	Disabled
ACPI Suspend Type	S1(POS)
Run VGABIOS if S3 Resume	Auto
Power Management	User Define
Video Off Method	DPMS
Video Off IN Suspend	Yes
Suspend Type	Stop Grant
Modem Use IRQ	NA
Suspend Mode	Disabled
HDD Power Down	Disabled
Soft-Off by PWR-BTTN	Delay 4 Sec.
PowerOn by Ring	Disabled
USB KB Wake-Up From S3	Disabled
CPU Thermal-Throttling	50%
Resume by Alarm	Disabled
X Date (of Month) Alarm	0
X Time (hh:mm:ss) Alarm	0 : 0 : 0
Reload Global Timer Events	
Primary IDE 0	Disabled
Primary IDE 1	Disabled
Secondary IDE 0	Disabled
Secondary IDE 1	Disabled
FDD, COM,LPT Port	Disabled
PCI PIRQ(A-D)#	Disabled

PNP/PCI Configurations

PNP OS Installed	No
Reset Configuration Data	Disabled
Resources Controlled By	Auto (ESCD)
X IRQ Resources	Press Enter
PCI/VGA Palette Snoop	Disabled

PC Health Status

CPU Warning Temperature	70°C / 158°F
Current System Temp	
Current CPU1 Temperature	
Current CPUFAN1 Speed	
Current CPUFAN2 Speed	
IN0(V)	
IN1(V)	
IN2(V)	
+ 5 V	
+12 V	
-12 V	
- 5 V	
VBAT(V)	
5VSB(V)	

Frequency / Voltage Control

Auto Detect DIMM/PCI CLK	Enabled
Spread Spectrum	Disabled
CPU HOST/PCI Clock/PC133	Default
CPU Clock Ratio	X 11

Weitergehende Informationen

Beiliegend bei jeder Steuerungslieferung finden Sie weitere Informationen zu den CPU-Karten in der Herstellerdokumentation sowie eine Treiber-CD und diverse Anschlusskabel der jeweiligen CPU-Karte.

- Herstellerdokumentation der **FS-97A** Full-Size PICMG Slot-CPU-Karte (Pentium® M / Celeron® M)
- Herstellerdokumentation der **EmCore-i6419VL** Half-Size PCI Slot-CPU-Karte (Pentium® M / Celeron® M)
- Herstellerdokumentation der **IP-4MTP2G** Full-Size PICMG Slot-CPU-Karte (Pentium® M / Celeron® M)
- Herstellerdokumentation der **F845G/VE** Full-Size PICMG Slot-CPU-Karte (Pentium® 4)
- Herstellerdokumentation der **CITSP** Half-Size PCI Slot-CPU-Karte (Celeron®/Pentium®3)