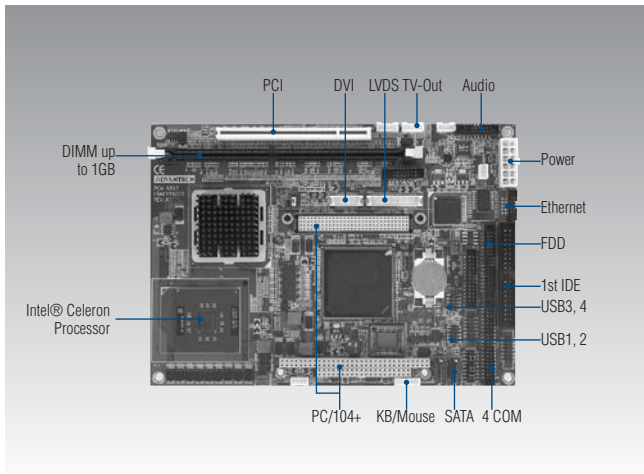


PCM-9582

Onboard Intel® Pentium® M
EBX SBC with Audio, VGA/LCD



Specifications

General

- **CPU** Embedded Intel Pentium M (Banias/Dothan)/Celeron M Processor supported
Celeron M 600 MHz (512 KB) PCM-9582F-M0A2E
Celeron M 1.0 GHz (512 KB) PCM-9582F-S0A2E
Pentium M 1.1 GHz PCM-9582F-S1A2E
Pentium M 1.4 GHz PCM-9582F-S4A2E
Pentium M 1.8 GHz PCM-9582F-S8A2E
uFCPGA2 (478-pin) PCM-9582F-00A2E
PCM-9582FG-00A2E
- **2nd Cache Memory** Depends on CPU type from 512 KB to 2 MB
- **System Chipset** Intel 855GME GMCH/ 6300ESB Chipset
- **BIOS** AWARD® 512 kbit Flash BIOS
- **System Memory** 184-pin DIMM socket, support ECC Double Data Rate (DDR) 128 MB to 1 GB, accept 128/256/512/1024 MB DR200/266/333 DRAM
- **Power Management** APM1.2, ACPI support
- **SSD** Supports CompactFlash® Card TYPE I/II (shared 2nd IDE Channel)
- **Watchdog Timer** Winbond® W83627, 255-level interval timer, setup by software
- **Expansion Interface** Supports PC/104 (Low Pin Count), PC/104 -Plus and Mini PCI interface
- **Battery** Lithium 3 V/196 mA

I/O

- **I/O Interface** 1 x EIDE (UDMA 100), 2 x SATA 150, 1 x FDD, 1 x K/B, 1 x Mouse, 3 x RS232, 1 x RS232/422/485, 1 x LPT
- **USB** 4 x USB 2.0 compliant Ports
- **Audio** ALC202, AC97 3D surround stereo sound
Supports Speaker out, CD-input, Line-in, Line-out, Microphone
- **IrDA** -
- **GPIO** 8-bit general purpose input/output

Ethernet

- **Chipset** Intel 82551ER, optional 82551QM, 82541GI (Gigabit)
- **Speed** 10/100 Mbps; (PCM-9582F);
10/100/1000 Mbps (optional) (PCM-9582FG)
- **Interface** 1 x RJ45 by cable
- **Standard** IEEE 802.3u 100Base-T and IEEE 802.3z/ab
1000Base-T compatible

Features

- Embedded Intel® Pentium® M 1.1 GHz / 1.4 GHz / 1.8 GHz
- Embedded Intel Celeron M 600 MHz/ 1GMHz
- Supports ECC DDR Memory
- EBX form factor standard and support for PC/104-Plus bus
- Supports up to 1000Base-T Ethernet
- Supports four USB 2.0 ports
- Supports up to two channel 48-bit LVDS interface
- Supports Enhanced Intel® Speedstep Technology
- Extended temperature optional

Display

- **Chipset** Intel 855GME chip integrated. (Extreme Graphics 2)
- **Memory Size** Optimized Shared Memory Architecture, supports up to 64 MB frame buffer using system memory
- **Resolution** CRT Display mode: pixel resolution up to 1600 x 1200 at 85-Hz and 2048 x 1536 at 75-Hz
LCD Display mode: Dual channel LVDS panel supports up to UXGA panel resolution with frequency range from 25 MHz to 112 MHz
- **LCD Interface** 2 Channel (2 x 18-bit) LVDS
- **LVDS** Hirose connector support up to 2 channel (2 x 18-bit) LVDS LCD Panel
- **TV-Out (Cable optional)** Supports both NTSC/PAL, S-video and Composite Video
- **Dual Independent Display** CRT + 48-bit LVDS; DVI/TV-out + 48-bit LVDS; CRT + DVI

Mechanical and Environmental

- **Dimension (L x W)** 203 x 146 mm (8" x 5.75")
- **Weight** 0.85 kg (weight of total package)
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F)
- **Operating Humidity** 0% ~ 90% relative humidity, non-condensing
- **Storage Temperature** -20 ~ 70° C (accessories Storage temperature: -20 ~ 60° C)
- **Storage Humidity** 95% @ 60° C

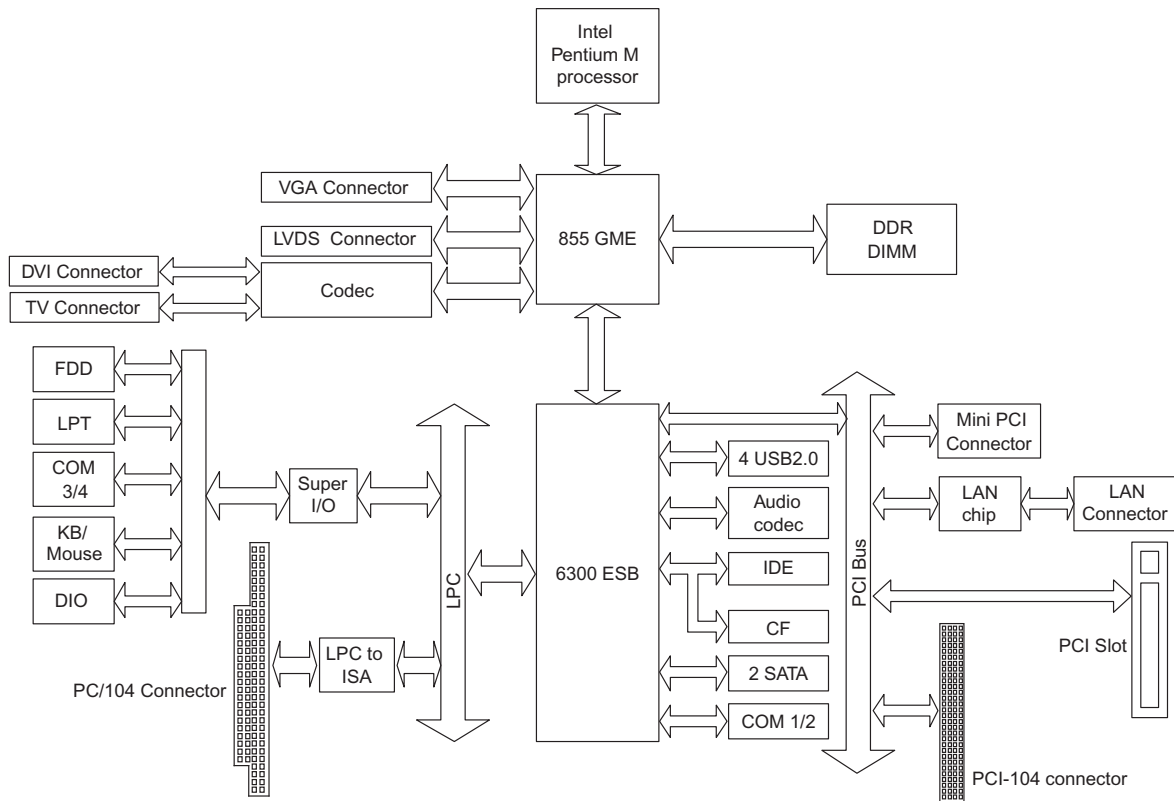
Power

- **Power Supply Voltage** +5 V ± 5%, +12 V ± 5%
- **Power Consumption** (Celeron M 600 with 256 MB DDR266)
Max(HCT): 2.63 A @ 5 V, 0.04 A @ 12 V
Typical: 2.1 A @ 5 V, 0.03 A @ 12 V
(Pentium M 1.1 G with 256 MB DDR266)
Max (HCT): 3.1 A @ 5 V, 0.15 A @ 12 V
Typical: 2.3 A @ 5 V, 0.13 A @ 12 V
(Pentium M 1.6G with 1.6 GHz with 256 MB)
Max (HCT): 4.8 A @ 5 V, 0.15 A @ 12 V
Typical: 2.54 A @ 5 V, 0.14 A @ 12 V

Packing List

- 1 x PCM-9582 SBC
- 1 x Mini Jumper Pack (p/n:9689000002)
- 1 x Startup Manual
- 1 x Utility CD
- 1 x ATX Power Cable (p/n:1700001112)

Board Diagram



Ordering Information

Part No.	CPU	L2 Cache	CRT	LVDS	DVI	TV-out	10/100	Giga LAN	Audio	USB2.0	RS-232	RS-232/422/485	LPT/FDD/KB/MS	CF	SATA	PCI-104 connector	PC/104 connector	PCI Slot	Mini PCI	Thermal Solution	Operation Temp.
PCM-9582F-00A2E	Socket 479	-	Yes	36-bit	Yes	Optional	1	--	Yes	4	3	1	Yes	Yes	2	Yes	Yes	1	1	Active	0 ~ 60° C
PCM-9582FG-00A2E	Socket 479	-	Yes	36-bit	Yes	Optional	--	1	Yes	4	3	1	Yes	Yes	2	Yes	Yes	1	1	Active	0 ~ 60° C
PCM-9582F-S8A2E	Pentium M 1.8 GHz	2 MB	Yes	36-bit	Yes	Optional	1	--	Yes	4	3	1	Yes	Yes	2	Yes	Yes	1	1	Active	0 ~ 60° C
PCM-9582F-S4A2E	LV Pentium M 1.4 GHz	2 MB	Yes	36-bit	Yes	Optional	1	--	Yes	4	3	1	Yes	Yes	2	Yes	Yes	1	1	Passive	0 ~ 60° C
PCM-9582F-S1A2E	LV Pentium M 1.1 GHz	1 MB	Yes	36-bit	Yes	Optional	1	--	Yes	4	3	1	Yes	Yes	2	Yes	Yes	1	1	Passive	0 ~ 60° C
PCM-9582F-S0A2E	ULV Celeron M 1.0 GHz	512 KB	Yes	36-bit	Yes	Optional	1	--	Yes	4	3	1	Yes	Yes	2	Yes	Yes	1	1	Passive	0 ~ 60° C
PCM-9582F-M0A2E	ULV Celeron M 600 MHz	512 KB	Yes	36-bit	Yes	Optional	1	--	Yes	4	3	1	Yes	Yes	2	Yes	Yes	1	1	Passive	0 ~ 60° C

Optional Accessories

- **PCM-10586-6200E** Wiring kit for PCM-9582
- **1703050306** TV-out cable
- **1703100260** USB cable (26 cm)
- **1703100121** USB cable (12 cm)
- **PCM-110-00A3E** 1-slot PCI riser card for 5.25" biscuits
- **PCM-120-00A3E** 2-slot PCI riser card for 5.25" biscuits
- **PCM-200-00A2E** PCI-104 to PCI bus module
- **MIO-3120-00A1E** Mini PCI interface to Wireless 802.11 b/g communication module
- **MIO-3121-00A1E** Mini PCI to 4 COM Module
- **MIO-3140-00A1E** Mini PCI interface to SATA storage module
- **MIO-3150-00A1E** Mini PCI interface to video capture module
- **MIO-3130-00A1E** Mini PCI Interface to Dual LAN Communication Module
- **MIO-3131-00A1E** Mini PCI Interface to Single Giga LAN Communication Module