# CEM820

Intel® Pentium® M COM Express™ Type-II Module

Socket 478

Intel® ICH6M

Intel® 915GME/910GMLE

Double deck DDRII SODIMM
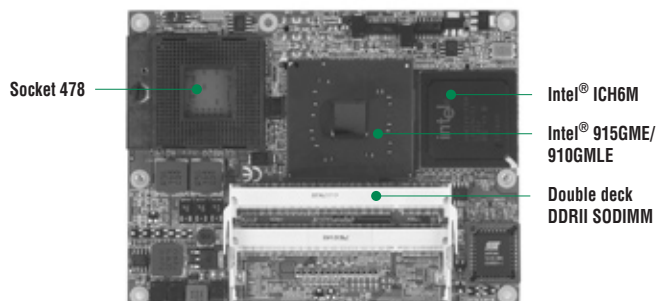
Features

- ▶ Intel® Pentium® M / Celeron® M processor
- ▶ Intel® 915GME/910GMLE+ICH6M chipset
- ▶ DDR2 400/533 up to 2GB
- ▶ With high performance integrated graphic controller and discrete solution through PCIe x16 interface
- ▶ 19 lanes for PCIe
- ▶ 8 USB 2.0 ports
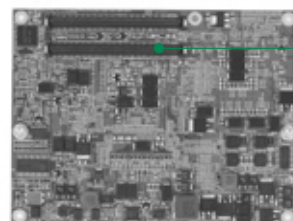
COM Express™ type II conn.

Rear view

System

CPU	Intel® Pentium® M / Celeron® M processor with FSB 400/533 MHz
System Memory	2 x 200-pin SODIMM support DDR2 PC2-3200/4200 max. up to 2GB
Chipset	Intel® 915GME/910GMLE+ICH6M chipset
BIOS	Phoenix-Award 4Mbit with RPL/PXE LAN Boot ROM, SmartView and Customer CMOS Backup
Watchdog Timer	255 levels as Reset from 0~255 seconds
Expansion Interface	* 19 lanes for PCIe; one PCIe x16 for discrete graphic card or SDVO for converting solution; four PCIe x1 for add-on peripherals * PCIe Mini card specifications supported * 32-bit/33MHz PCI for 4 Bus masters
Size	125 x 95 mm
Temperature	0~60°C, operation
Operation Humidity	10% ~ 95% relative humidity, non-condensing

I/O

MIO	1 x PATA-100 IDE, 2 x SATA-150, LPC interface
GPIO	4 channel IN and 4 channel OUT
Ethernet	Realtek RTL8111B for Gigabit Ethernet
Audio	AC'97/HD Audio interface for external Codec
USB	8 x USB 2.0 port
SMBus	1 port
I²C	1 port

Display

Chipset	Integrated in Intel® 915GME/910GMLE
Memory Size	Max. up to 128MB frame buffer sharing system memory
Resolution	* Standard Display Mode: CRT: 2048 x 1536; LVDS LCD: 1600 x 1200
Output Interface	* CRT for DAC output through interface connector * LVDS LCD through interface connector

Packing List

Quick installation guide, manual, driver, utility CD

Ordering Information

Standard	
CEM820VG	COM Express type-II module with socket 478, CRT/LVDS LCD, Gigabit Ethernet
CEM820VG-1GE	CEM820 with Intel® Celeron® M ULV 1GHz/ZC CPU onboard, CRT/LVDS LCD, Gigabit Ethernet
Optional	
507CEM83020E	CEM830 heatspreader module for PGA type CPU
507CEM83030E	CEM830 heatspreader module for BGA type CPU
CEB94000	ATX form factor baseboard

* All specifications and photos are subject to change without notice.