ROBO-8713UGA
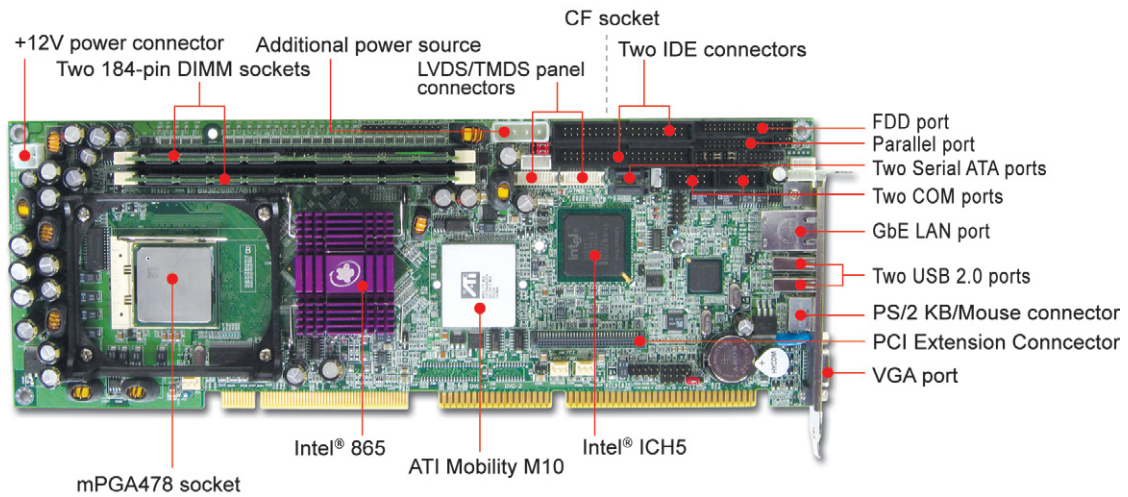
Intel® Pentium® 4 or Celeron® (D) processor based PICMG SBC with DDR 400 SDRAM, AGP 8X VGA, Gigabit Ethernet and Audio

+12V power connector
Two 184-pin DIMM sockets
Additional power source
CF socket
LVDS/TMDS panel connectors
Two IDE connectors
FDD port
Parallel port
Two Serial ATA ports
Two COM ports
GbE LAN port
Two USB 2.0 ports
PS/2 KB/Mouse connector
PCI Extension Conncector
VGA port
mPGA478 socket
Intel® 865
ATI Mobility M10
Intel® ICH5

FEATURES

- Intel® Pentium® 4 processor with Hyper-Threading technology runs at 800MHz FSB

- ATI M10 graphics support dual view of LCD/CRT, TV/CRT, LCD/LCD and LCD/TV displays configuration

- Wire-speed Gigabit Ethernet based on Communication Streaming Architecture (CSA) with double throughput than PCI based Ethernet

- Scalable graphics supports from Intel® 865 integrated Extreme Graphics 2 to ATI M10 graphics controller integrated 64MB display memory via AGP 8X

- Rich expansion capability thru proprietary PCI

ORDERING GUIDE

Standard	**ROBO-8713UGA** Socket 478 Pentium® 4 or Celeron® (D) processor based PICMG SBC with DDR 400 SDRAM, M10 w/ 64MB via AGP 8X, Gigabit Ethernet and audio **ROBO-8713VGA** Socket 478 Pentium® 4 or Celeron® (D) processor based PICMG SBC with DDR 400 SDRAM, integrated graphic, Gigabit Ethernet and audio
Optional	**ROBO-U160H** SCSI extension module with Portwell OmniPCI™ connection interface **ROBO-N201G** Single Gigabit Ethernet port extension module with Portwell OmniPCI™ connection interface **ROBO-N201G2** Dual Gigabit Ethernet port extension module with Portwell OmniPCI™ connection interface **ROBO-N100P** Single Fast Ethernet port extension module with Portwell OmniPCI™ connection interface **DVI-D Cable** TMDS adapter cable for DVI interface flat panel **PA-M1ATU (ROBO-8713UGA)** Multimedia kit for P4 SBC with audio, TV out and USB ports **PA-M1AU (ROBO-8713VGA)** Multimedia kit for P4 SBC with audio and USB ports **CABLE-HDD-SATA** Adapter cable for hard drive type power connector to SATA power connector

GENERAL

CPU	CPU & Package: Intel® Pentium® 4 or Celeron® (D) processor in the mPGA478 package FSB: 800/533/400MHz
Chipset	Intel® 865 and ICH5
Memory	Up to 2GB dual channel DDR 400/333/266 SDRAM on two 184-pin DIMM sockets
BIOS	Award BIOS
Display	- ATI Mobility M10 graphics controller (ROBO-8713UGA) * 64MB display memory * TMDS & LVDS interfaces support * Dual View support * TV out -Intel® 865 integrated Extreme Graphics 2.0 (ROBO-8713VGA)
Ethernet	- 10BASE-T/100BASE-TX/1000BASE-T Ethernet - Gigabit Ethernet via CSA interface - One RJ-45 connector with two LED indicators
Audio	AC'97 2.2 Audio
SCSI	N/A
Expansion Interface	Proprietary PCI connection interface
ISA Bus	64mA high driving ISA bus interface to backplane
EIDE	Support four EIDE devices with Ultra DMA 100/66/33
Solid State Disk	- One Type II CF socket - On secondary EIDE channel - Bootable for no drives on primary channel
I/O	- Support two SATA 150 devices - Two serial, one parallel, one IrDA and four USB 2.0 ports (two on bracket) - 8 high driving GPIO (programmable GPI or GPO) - One 6-pin mini-DIN connector for keyboard and mouse - One 5-pin header for external keyboard connection
ACPI Function	- ATX function with 4-pin header connect to backplane - Modem-Ring-On and Wake-On-LAN
Hardware Monitoring	System monitor (fan, temperature, voltage)
Watchdog Timer	Programmable via software from 0.5 sec. to 254.5 min.
Power Requirement	Typical: +5V@6.0A; +12V(CPU)@5.7A; +12V(System)@0.8A
Mechanical	Dimension : 338.5(L) x 122(W) mm; 13.33"(L) x 4.8" (W) PCB : 8-layer
Environment	Operating Temperature: 0 to 50ºC Storage Temperature: -20 to 80ºC Relative Humidity: 5% to 90%, non-condensing
Approval	CE, FCC Class A
MTBF	86,998 hrs