

G5C900-B10 rev. AM0 COM Express Board

PROCESSOR

- Intel® Celeron® M processor ULV 423 (BGA)
 - Core speed: 1.06GHz
 - Fanless solution
- Cooling options
 - Heatspreader
 - Passive heat sink

CHIPSET

- Intel® chipset
 - Intel® 945GME Graphics Memory Controller Hub (GMCH) -
 - Intel® 82801GB I/O Controller Hub (ICH7M)

SYSTEM MEMORY

- One 200-pin SODIMM socket (1.8V)
- Supports up to 2GB DDR2 SDRAM
- Supports 533MHz and 667MHz DDR2 SDRAM

BIOS

- SPI interface BIOS (8Mbit)

GRAPHICS FEATURES

- Internal graphics features
 - DVMT 3.0 support
 - Intel® Dual-Frequency Graphics Technology
 - Intel® Smart 2D Display Technology
 - Dual Independent display pipes
 - Intel Gen 3.5 Integrated Graphics Engine
- Integrated graphics interface
 - Analog CRT
 - Integrated 400MHz RAMDAC
 - Analog monitor supports up to UXGA
 - LVDS interface
 - Panel support up to UXGA (1600x1200)
 - 25MHz-112MHz single/dual channel @ 18bpp, TFT panel type support

LAN FEATURES

- One Marvell 88E8053 PCI Express Gigabit controller
- Supports 10Mbps, 100Mbps and 1Gbps data transmission
- IEEE 802.3 (10/100Mbps) and IEEE 802.3ab (1Gbps) compliant

AUDIO FEATURES

- Supports AC97 digital interface

EXPANSION INTERFACES

- 1 PCI Express x16
- 3 PCI Express x1
- 4 PCI (Master)

SERIAL ATA INTERFACE

- Supports two Serial ATA interfaces which are compliant with SATA 1.0 specification
- Supports SATA devices with speed up to 1.5Gb/s

IDE INTERFACE

- Supports up to 2 IDE devices
- Supports up to Ultra ATA 100

DAMAGE FREE INTELLIGENCE

- Monitors CPU temperature and overheat alarm
- Monitors CPU Smart fan speed and failure alarm
- Monitors Vcore/1.8V/1.5V voltages and failure alarm

CONNECTORS

- COM Express connectors
 - Two 220-pin COM Express standard connectors
 - Module connector pin: Tyco 3-6318490-6
- 1 CPU fan connector

TEMPERATURE

- Operating: 0°C to 60°C
- Non-operating: -40°C to 85°C

HUMIDITY

- Operating: 10% to 90%

POWER

- Input: 12V, 5VSB
- Max load power: 130W

REGULATORY

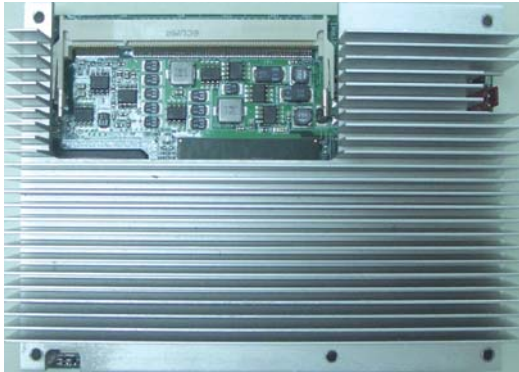
- EMC: CE, FCC Part 15 Class B

PCB

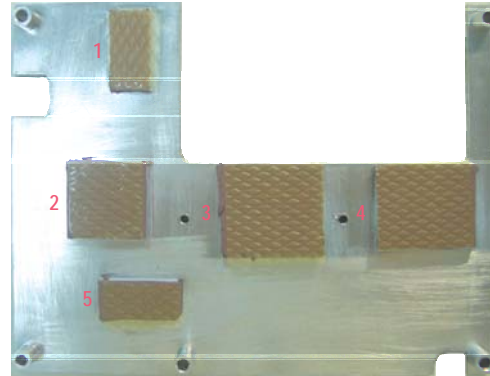
- Dimensions
 - COM Express basic form factor
 - 9.5cm (3.74") x 12.5cm (4.9")
- Compliance
 - PICMG COM Express R1.0 basic form factor, Type 2



Passive Heat Sink



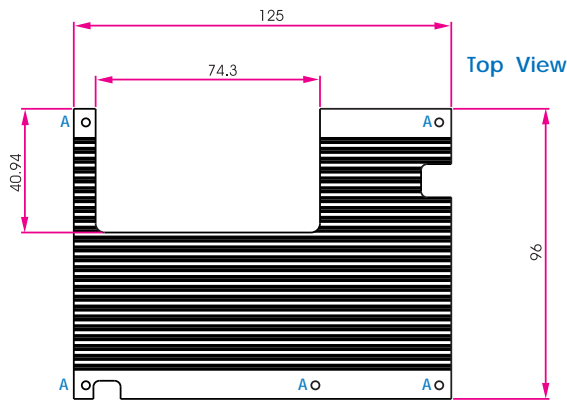
Passive Heat Sink on G5C900-B10
(top view)



Bottom View of the Heat Sink

- "1" to "5" denote the locations of the thermal pads designed to contact the corresponding components that are on G5C900-B10.
- Remove the plastic covering from the thermal pads prior to mounting the heat sink onto G5C900-B10.

Dimensions



"A" mounting posts

- These mounting posts are used to mount the heat sink and G5C900-B10 assembly onto the carrier board.
- Use M2.5 screws with minimum length of 15 mm.

