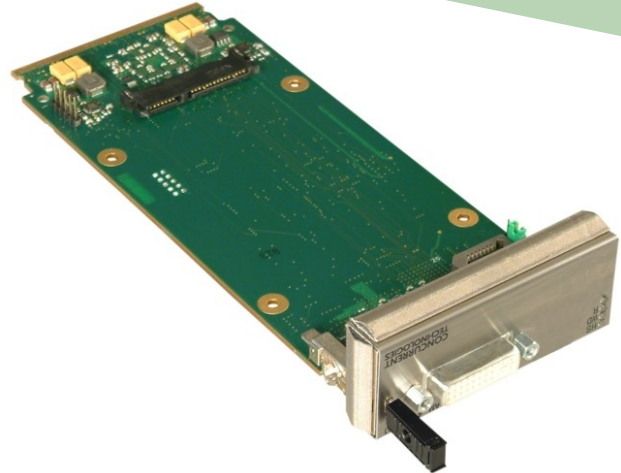


AMC Graphics Adaptor with Mass Storage Option



APPLICATIONS

The AM 400/x01 is a single-width full height graphics adaptor. The on-board Silicon Motion™ SM722 3D/2D dual display controller manages the graphics processing. The adaptor supports digital flat panel (DFP) displays and CRT monitors with an RGB interface up to 1280 x 1024, both via a single front panel DVI-I



connector. These interfaces can be driven simultaneously with the same or different images. For extra functionality, a Serial ATA or Serial Attached SCSI disk drive is also supported. Market applications are varied, but include the industrial, control, defense and medical sectors.

HIGHLIGHTS

- Single-width, full-height AdvancedMC™ module:
 - compliant to AMC.0
 - option for mid-height AMC module
- High performance 3D/2D dual display controller:
 - 8 Mbytes of internal DRAM
 - maximum resolution 1280 x 1024
 - maximum color depth up to 24-bit per interface
 - maximum refresh rate up to 85Hz
- Supporting CRT and DFP interfaces:
 - with simultaneous CRT/DFP capability
 - DFP PanelLink® via front panel DVI-I connector
 - CRT RGB via front panel DVI-I connector
- x1 PCI Express® fabric port:
 - AMC.1 Type 1
- Support for a 2.5 inch hard disk drive:
 - compliant to AMC.3 AdvancedMC specification for storage
- Independent Hot Plug Detect and DDC on DVI-I
- 512 Kbit Flash ROM for Video BIOS
- Hot swap compliant:
 - compliant to AMC.0
- IPMI (Intelligent Platform Management Interface):
 - IPMI Version 1.5 according to AMC.0
- Extended temperature version available:
 - -25°C to +70°C (E-Series)
 - variants without hard disk drive only
- Supported by Windows® 2000, Windows® XP, Windows® XP Embedded, Linux® and QNX®
- Supplied with a DVI-I to HD15 (VGA) adaptor

Graphics Processor

- utilizes Silicon Motion™ SM722 3D/2D_dual display controller, which provides:-
 - dual display capability
 - 24-bit true color
 - picture rotation of 90°, 180° or 270°
 - embedded 8 Mbytes DDR SDRAM
 - integrated 235MHz RAMDAC
 - 128-bit graphics engine
 - hardware accelerated support for Microsoft® DirectX® 9
 - supports OpenGL 2.0 under Windows® and Linux®
 - PCI interface

CRT Interface

- up to 1280 x 1024 pixels, 24-bit color @ 85Hz refresh rate
- supports RGB displays via DVI-I connector
- supplied with a DVI-I to HD15 adaptor for standard VGA connectors (CB DVI/121-00)

Flat Panel Interface

- PanelLink® interface provide by Silicon Image Sil164 utilizing Transition Minimized Differential Signaling (TMDS):-
 - accessed via front panel DVI-I connector
- supports active matrix (TFT) and passive (DSTN) panels
- up to 1280 x 1024 pixels, 24-bit color @ 60Hz refresh rate
- supports twisted-pair cable, up to 5 meters in length

Dual Displays

- DFP and CRT displays can be driven simultaneously with:-
 - the same resolution
 - the same image
 - the same or different refresh rate
- dependent on operating system software
- maximum recommended resolution:-
 - 1024 x 768 pixels
 - 24-bit color depth for both displays

Mass Storage

- supports optional on-board SATA hard disk:-
 - AMC.3 Type S2
 - transfer rate up to 150 Mbytes/s
 - connection on Port 2

PICMG AdvancedMC™ Interfaces

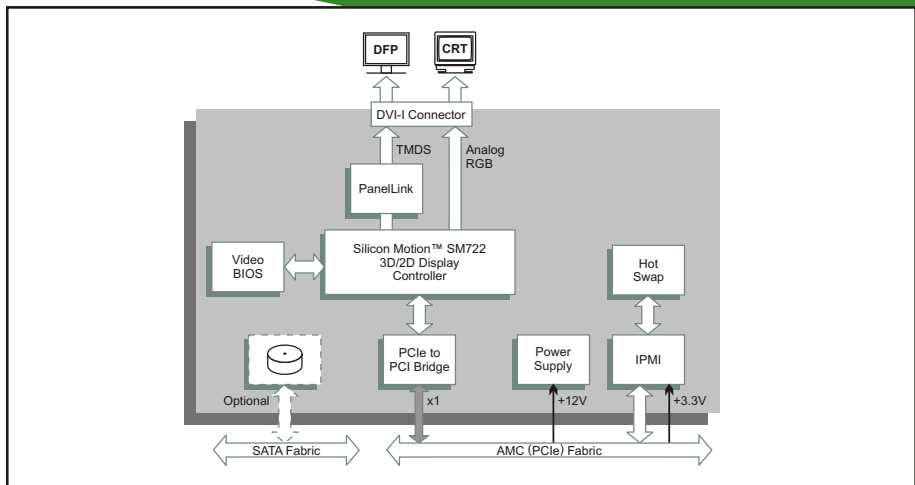
- hot swap compliant to AMC.0
- x1 PCI Express® fabric connection:-
 - AMC.1 Type 1
 - connection on Port 4
 - transfer rate up to 2.5 Gbytes/s
 - connects to SM722 via PCI bridge
 - supports external fabric PCIe clock or on-board PCIe clock

BIOS EPROMs

- 512 Kbit parallel Flash for video BIOS

IPMI

- IPMI Version 1.5 according to AMC.0
- on-board MMC (Module Management Controller)
- supports 8 Kbytes of non-volatile memory



Software Support

- support for Windows® 2000, Windows® XP, Windows® XP Embedded, Linux® and QNX®

Electrical Specification

- requires 3.3V and 12V supplies
- +3.3V @ 0.1 A; +/-5% (max)
- +12V @ 0.1 A; +/-2V (typical, without HDD)

Environmental Specification

- operating temperatures:-
 - 5°C to +40°C (N-Series, with HDD fitted)
 - 0°C to +55°C (N-Series, without HDD)
 - -25°C to +70°C (E-Series, without HDD)
 - -40°C to +85°C (storage)
- Relative Humidity non condensing
 - 5% to 95% (operating)
 - 5% to 95% (storage)

Mechanical Specification

- AMC.0 single-width full height form-factor: 180.6mm x 73.5mm (7.1 inches x 2.9 inches):-
 - mid-height version available



AM 400/101 shown with Hard Disk Drive fitted

ORDERING INFORMATION

Order Number Product Description (Hardware)

AM 400/101-xy Full height AMC Graphics Adaptor
 AM 400/301-xy Mid height AMC Graphics Adaptor

Replace the order number suffix (y) with selections from the following:
 where x = PCIe Clock and SATA Hard Disk kit where y = Hard Disk kit fitted

00 - onboard PCIe clock only	0 - typical capacity HDD
1y - onboard PCIe clock, plus SATA Hard Disk kit	5 - larger capacity HDD
20 - external PCIe fabric clock only	7 - HDD screw kit only
3y - external PCIe fabric clock, plus SATA Hard Disk kit	

Note: DVI-A to HD15 adaptor connector supplied as standard for use with front panel DVI-I connector

CB DVI/121-00 DVI-A connector to VGA HD15 connector (this connector is supplied with the AM 400/x01-xy)
 CB DVI/122-00 DVI-I connector Y-split cable to VGA HD15 connector & DVI-D connector

For extended temperature, E-Series, please contact your local sales office