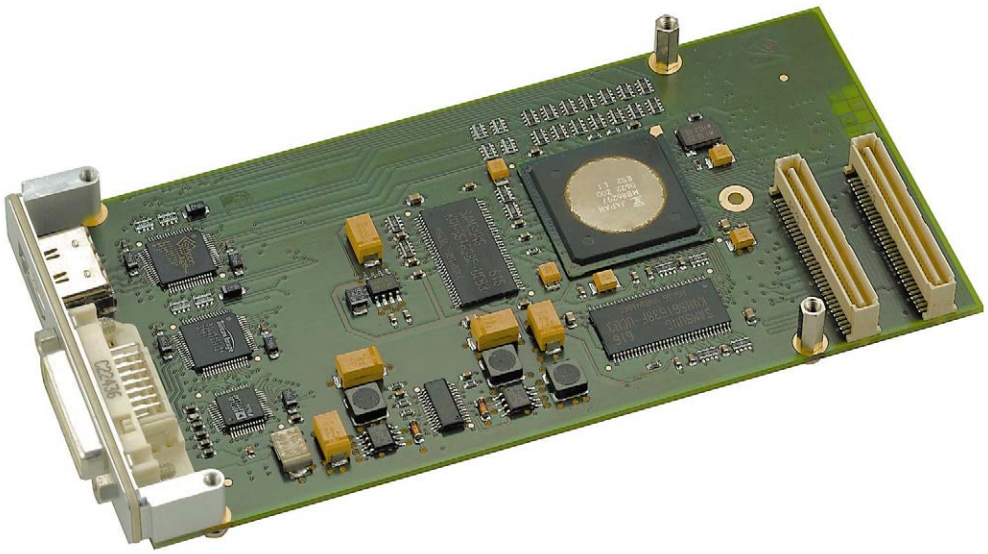
PMC VIEW-3

PMC Graphics Module

↪ Graphics Module for CPU boards with PMC modules

↪ preliminary

PMC Graphics Module



Main Features

- Graphics controller Fujitsu MB86297
- 128 MByte graphics memory on-board
- Video resolution up to 1280 x 1024 at 60 Hz (106 MHz pixel clock)
- 8, 16, 24 bits/pixel
- DVI-I output and additional HDMI output with analog and digital signals
- Single size PMC module
- Drivers for Windows and Linux
- PCI 2.1 compliant with 32 bit / 66 MHz

Overview

The PMC view graphics module is intended mainly for PowerPC boards in VMEbus and in CompactPCI environments. The chip sets used on these boards normally have no graphics included. These boards can be equipped with frame buffer graphics with this PMC. Linux operating support for PowerPC is available.

Technical Details

The PMC graphics card permits simultaneous connection of two TFTs or one TFT and one CRT monitor, where different image sections can be displayed on the monitors. Different timing parameters are also possible for the two outputs.

Graphics memory can be incorporated linearly into the address area of the host computer. A corresponding data set for initialization of the graphics card can be provided.

The graphics memory can then be written with user-supplied routines. Since the graphics card is currently only designed to visualize image data, driver support by ELTEC for the various operating systems is limited to this. However, 3rd-party drivers under Linux or Windows for the graphics controller can be used.

Graphics Controller

The graphics controller on the PMC view is a Fujitsu Carmine MB86297 single-chip device. It has a PCI interface, the graphics controller, 128 MB off-chip memory (DDR-266, 64 bits wide), and the monitor outputs on one chip.

The graphics controller has a comprehensive set of 2D and 3D graphics accelerator commands. It has 8 memory layers that can be combined during the readout process. It can draw up to 10 M polygons per second. To use the accelerated commands, drivers in the target operating systems are needed however.

Bus Interface

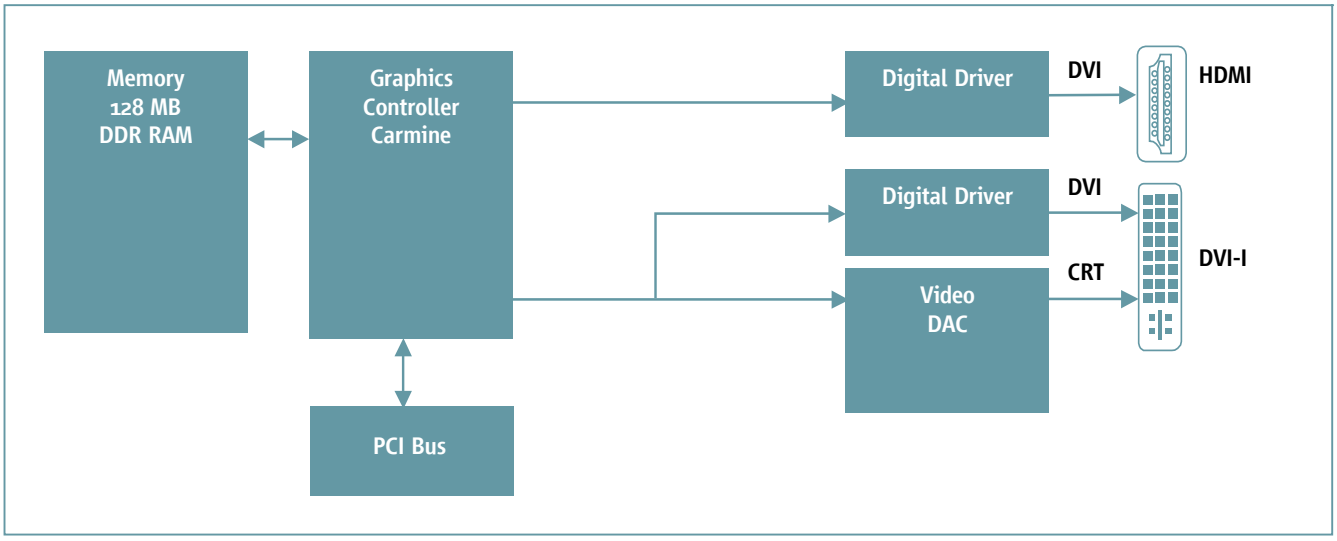
The graphics controller is connected to the PMC interface through its PCI 2.1-compliant interface. It operates with 32 data bus bits at 66 MHz .

RAMDAC

This unit converts digital video into analog signals. Before conversion, a look-up table can be used to assign 24-bit color triples to 8-bit frame buffer values. The maximum dot clock is 106 MHz for 1280 * 1024 * 60 Hz.

Outputs

One of the video channels is routed to a DVI-I (single link) connector with digital TMDS-encoded signals as well as analog RGB signals. The second channel is routed to a HDMI connector (no HDCP copy protection features, no I2C connection) for digital data.



GERMANY

ELTEC Elektronik AG

Galileo-Galilei-Strasse 11
55129 Mainz
PO Box 10 03 64
55134 Mainz

Fon +49 6131 918 100
Fax +49 6131 918 195
Email info@eltec.com
www eltec.com

FRANCE

ELTEC International SARL

1, Allée des Garays
91872 Palaiseau
France

Fon +33 1 64 47 18 77
Fax +33 1 64 47 09 33
Email info.fr@eltec-france.fr
www eltec-france.fr

USA

American **ELTEC**, Inc.

2401 Windjammer Way
Las Vegas, Nevada 89107
USA

Fon +1 702 878 40 85
Fax +1 702 878 47 35
Email info.us@eltec.com
www americaneltec.com

UK

ELTEC International PLC

Unit 32, Stratford Office Village
Wolverton Mill
Milton Keynes MK12 5NS
United Kingdom

Fon +44 1908 32 00 55
Fax +44 1908 31 01 07
Email info.uk@eltec.com
www eltec.com

Documentation

↘ Free Internet

Please contact your local sales office for detailed information.