

VME-GDP

High Resolution Color Graphic Processor

Not recommended for new designs!

Features

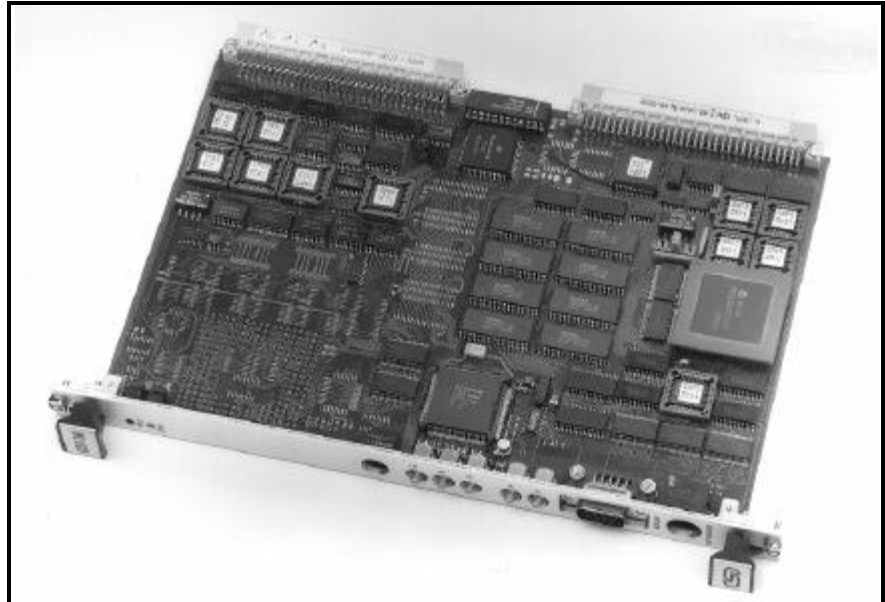
- Graphic processor GDP HD64400
- CLUT using 256 of 16 million colors and hardware cursor
- Max. 1600 x 1200 pixels at 135 MHz pixel frequency
- Video memory 2 MB VRAM max. and 16 MB DRAM max. frame memory
- Mouse and keyboard interface

Software support

- PGRAF - graphic manager and instruction interpreter for GDP HD64400

Applications

- Process control systems
- Process visualization
- Industrial graphic terminals



High Resolution Graphic Board

VME-GDP is a high-resolution color graphic board containing mouse and keyboard interface.

The graphic section of this VMEbus slave board is equipped with a powerful GDP HD64400 graphic controller. For the video memory up to 2 Mbytes video RAM and additionally max. 16 Mbytes DRAM as image buffer and GDP instruction memory are available.

The graphic board contains an 8 bits color lookup table for 256 of 16.7 million colors. The maximum pixel frequency of VME-GDP at a resolution of 1024 x 768 pixels and 105 Hz refresh rate amounts to 135 MHz. For resolutions greater than 800 x 640 pixels 2 Mbytes of VRAM are essential.

Software Support

For the host CPU is the multitasking capable graphic package PGRAF for supporting the powerful instructions of graphic controller GDP 64400 available.

The graphic controller can process interrupts and generates VMEbus interrupts as well.

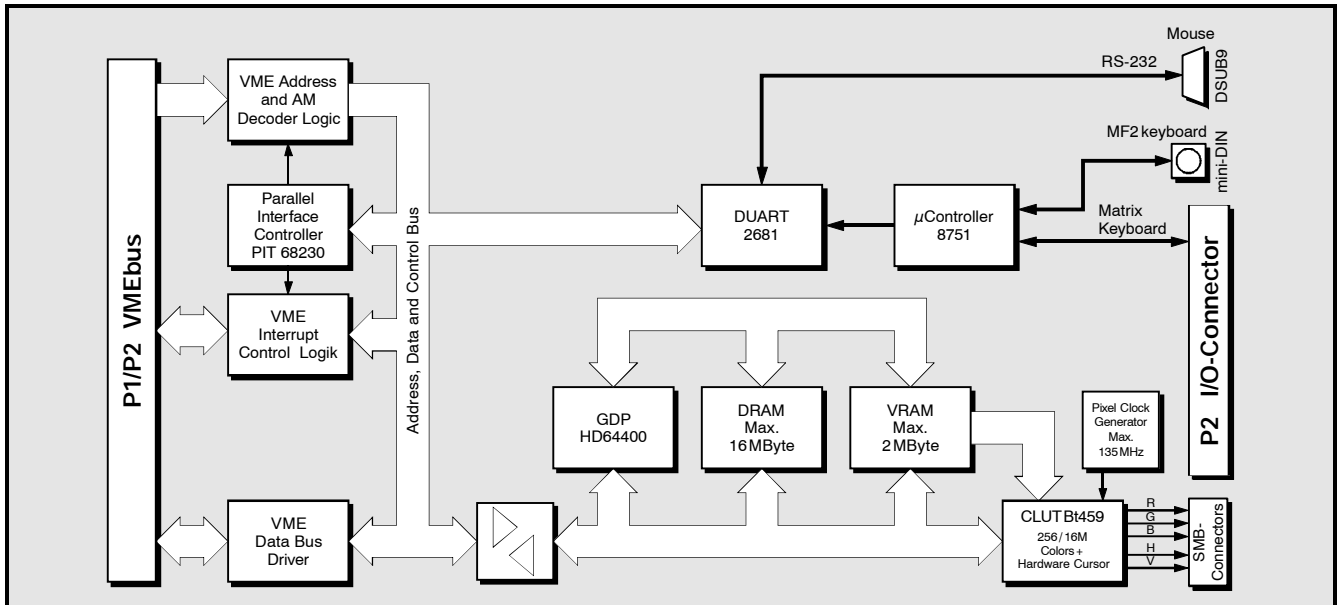
To be able to use the available software, the GDP must always be operated in the A32/D32 mode.

Graphic Package PGRAF

PGRAF is a multitasking capable graphic package for support of HD64400 GDP graphic processors. The graphic package contains graphic base functions for process - graphics display as well as for drawing of free definable lines and poly lines, circles and ellipses as well as arcs of circles and ellipses in absolute or relative mode. Moreover the graphic package PGRAF contains functions for zooming with or without interpolation, stepless rotation of graphic elements and clipping (defining a range, where drawing is enabled or disabled). Additionally complex text displays are supported including proportional characters and italics as well as filling of compact planes with any definable fill pattern. Additionally for graphic output a terminal emulation is supported, similar to VT52 for test output, as well as a hardcopy function for various printers such as e.g. NEC P62 Color or HP DeskJet 550C.

VME-GDP

High Resolution Color Graphic Processor



Technical Specifications:

Process section:

Graphic processor:	GDP 64400
Video memory:	max. 2 Mbytes VRAM and max. 16 MB DRAM
Resolution:	variable by programmable pixel clock generator; max. 1600 x 1200 pixels at 135 MHz pixel frequency
Color information/pixel:	8 bits
Color look-up table:	256 of 16.7 million colors
Video output:	RGB analog
Interfaces:	MF2 keyboard, mouse

VMEbus section:

Base address:	selectable by software over the whole address space over 4 Gbytes/16 Mbytes
VMEbus revision compatibility:	IEEE 1014 rev. D
Data transfer options:	SADO32, SD32

General:

Temperature:	0...70 °C
Humidity:	max. 90%, non-condensing
Connector types:	P1, P2 (VMEbus): DIN 41612 - C96 P3 (keyboard/front panel): mini DIN female P4 (mouse/front panel): DSUB9 male BNC1..BNC5 (video signals): SMB females
Board size:	160 mm x 233 mm
VME dimensions:	6 U height, 1 slot width
Weight:	approx. 350 g
Power consumption:	approx. 3.2 A at +5 V ±5 %

Order information:

Designation		Order no.
VME-GDP-1M	High-resolution graphic board including mouse and keyboard interface, GDP64400, 1 MB VRAM	V.1504.02
VME-GDP-2M	as above, but 2 MB VRAM (essential for resolutions greater than 800 x 640)	V.1504.04
VME-GDP-4MD-G	additionally 4 MB graphic DRAM	V.1504.11
VME-GDP-16MD-G	additionally 16 MB graphic DRAM	V.1504.12
Software:		
VME-GDP-PGRAF	PEARL graphic library for RTOS-UH	V.1504.40
GED	Graphic editor for RTOS-UH	P.4016.02
HCOPY	Hardcopy program for RTOS-UH	P.4021.01