

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

DIAMOND SYSTEMS CORPORATION

GPIO-MM FAMILY

DIGITAL I/O AND COUNTER / TIMER



- Multiple configurations and pin definitions
- Up to 96 digital I/O pins with programmable direction
- Up to 10 16-bit counter / timers with a 40MHz clock with 8 fixed digital inputs and 8 fixed outputs
- EEPROM storage of address / interrupt configuration for automatic power-on configuration
- 3 pin headers for a total of 100 I/O pins

DESCRIPTION

The GPIO-MM Family consists of a set of digital I/O and counter / timer modules with various port and pin configurations. Each board uses identical hardware with a 200K gate Xilinx Spartan II RAM-based FPGA. The varying configurations are based on different FPGA code.

Base hardware supports up to 96 digital I/O pins with programmable direction based on 8255 cores and up to 10 16-bit counter / timers based on 9513 cores. Up to 100 I/O pins are provided by the module including four fixed digital outputs. 48 of the 100 I/O pins are buffered.

The three configurations currently offered include one configuration with 96 programmable digital I/Os and no counter / timers. The other two configurations provide 48 buffered digital I/O pins and 10 16-bit counter / timers. These two configurations differ in pin out definition to provide compatibility with two predecessor Diamond Systems products.

The board requires only a +5V input and operates from -40°C to +85°C.

ORDER INFORMATION

Part No.	Description
GPIO- MM-XT	48 DIO, 10 Counter / Timers (GMM pinout)
GPIO-MM-12-XT	48 DIO, 10 Counter / Timers (OMM pinout)
GPIO-MM-21-XT	96 DIO

SPECIFICATIONS

No. of I/O pins	100 (48 buffered)
Programmable Digital I/O	Up to 96 digital I/O with programmable direction based on 8255 cores
Counter / Timers	Up to 10 16-bit counter / timers based on 9513 cores
Base FPGA	Xilinx Spartan II, 200K gates, 40K RAM bits
Input Clock	40MHz
Output current, buffered I/O	Logic 0: 64mA max per line Logic 1: -15mA max per line
Output current, unbuffered I/O	±24mA max per line
Dimensions	3.55" x 3.775"
Power Supply	+5VDC ±10%
Operating Temp	-40°C to +85°C
Weight	2.2oz / 62.4 g
RoHS	Compliant
GPIO-MM Specifications	
Programmable Digital I/O	48 buffered (GMM pinout)
Fixed Digital I/O	8 Fixed Inputs and 8 Fixed Outputs
Counter / Timers	10 16-bit
Counter / Timer Modes	Counter, rate / square-wave generator, programmable one-shot, hardware / software triggered strobe
GPIO-21-MM Specifications	
Programmable Digital I/O	96, programmable, 48 buffered, 48 unbuffered (OMM pinout)
Counter / Timers	None
GPIO-12-MM Specifications	
Programmable Digital I/O	48 buffered (OMM pinout)
Fixed Digital I/O	8 Fixed Inputs and 8 Fixed Outputs
Counter / Timers	10 16-bit
Counter / Timer Modes	Counter, rate / square-wave generator, programmable one-shot, hardware / software triggered strobe

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP