



MDS General Purpose Board

Product Brief

Z i L O G

PB014601-0404

PRELIMINARY

Product Block Diagram

External Memory	External 8-Bit Bus	2 x 16 LCD Display
Two RS-232 2-wire Inputs	MDS- Compatible Processor Module	3 x 4 Keypad
Optional GPS, RF Transceiver, Digital Compass		ADC Inputs
	I ² C Bus Expanders	Buzzer
Relays, Temp Sensor, High-Drive Outputs		

Overview

The General-Purpose MDS application board (MDS-GP) provides a convenient and powerful peripheral platform for use with Z8 Encore!® and eZ80Acclaim!™ MDS-compatible processor modules. A number of PCB footprints and connectors are designed into the MDS-GP, giving design engineers the ability to add functions as needed. Terminal blocks are also provided on some I/O connections for easy attachment to other end user hardware.

A number of RS232 options are available on this product that can be selected under software control or using jumpers. Lots of possible applications can be developed with this and any ZiLOG MDS compatible processor module. ZiLOG's MDS processor modules are sold as stand-alone development kits that include everything you need at a low cost. Combining ZiLOG's MDS processor module with a MDS general-purpose board will give you lots of application possibilities.

Features

- Supports the Z8 Encore! 64K, 8K, and XP 4K series MDS CPU modules
- Supports the eZ80Acclaim! eZ80F91 MDS CPU module
- 2 x 16 Character LCD display
- 3 x 4 Keypad matrix
- 512K bytes Fast SRAM
- Both 5 and 9-12volt DC input jacks
- RS485 interface/screw terminal block I/O +12volt, D+, D-, GND (Power can be supplied to the board using this 12V input)
- Terminal block inputs for some ADC channels on the Z8 Encore! family
- 6 high-drive outputs with terminal blocks. Jumper selectable 5 or 12 volt supply
- Footprints for two relays with terminal block access.
- Plug-in for Trimble's Lasso SQ GPS module
- Plug-in for Maxstream (900MHz or 2.4GHz) Data module
- Buzzer
- I2C temperature sensor
- I2C 4-pin I/O connector
- External 8-bit data I/O connector. Can interface to Larger Graphic LCD Displays
- Large breadboard area
- Two 10-pin RS232 ports
- Pot control for one ADC channel
- Footprint for Dinsmore 1490 Digital Compass
- Software or jumper-controllable RS232 routing
- Footprints for additional Flash memory devices
- 4-layer PCB
- Battery option

- JTAG and ZDI debug interfaces
- 5 ¼ inches by 9 ¾ inches

Functional Diagram

Figure 1 provides a functional diagram of the MDS-GP board.

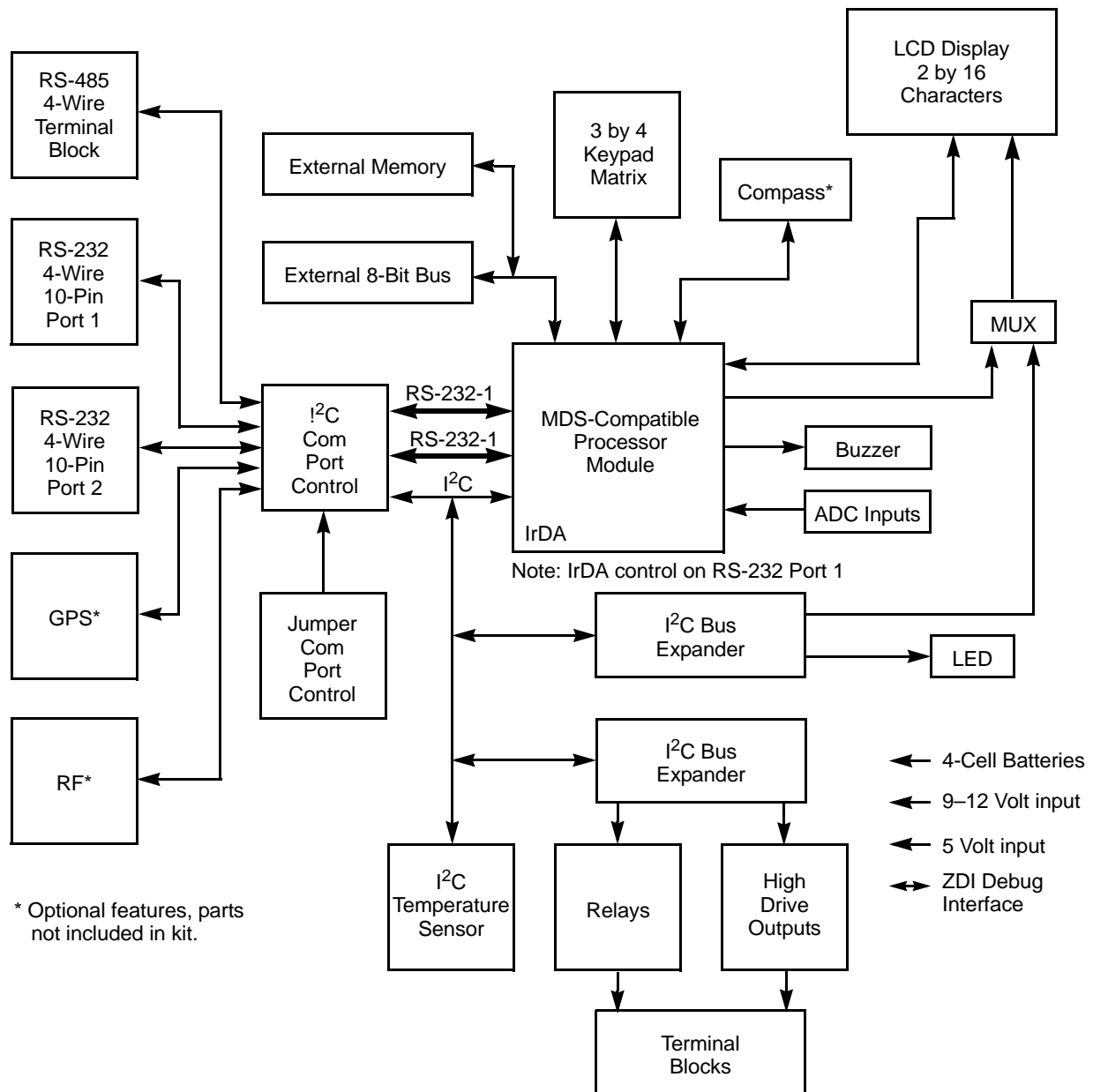


Figure 1. MDS-GP Functional Diagram



MDS-GP Board Accessories

The MDS-GP Board includes the following:

Hardware

- Z8 Encore![®] 8K Series Development board
- Smart Cable for PC to Z8 Encore![®] 8K Series Development board (DB9 to 6-pin male)
- 5VDC power supply

Software (on CD-ROM)

- ZDS II–Z8 Encore![®] IDE with ANSI C-Compiler
- Sample code
- Document Browser
- Acrobat Reader install program

Documentation

- Quick Start Guide
- Registration card
- MDS-GP board technical documentation (on CD-ROM)
 - User Manual
 - ZDS II - IDE User Manual
 - Product brief



Ordering Information

Order the MDS-GP board and related products from ZiLOG, referencing the following part numbers. For more information regarding ordering, please consult your local ZiLOG sales office. The ZiLOG website at www.zilog.com lists all regional offices and provides additional Z8 Encore![®] product information.

eZ80Acclaim!

- eZ80F91 Development Kit, PN EZ80F910200ZCO
- eZ80F91 module: EZ80F915050MOD

Z8 Encore!

- 64K Series Development kit, PN Z8F64200100KIT
- 8K Series Development kit, PN Z8F08200100KIT
- XP 4K Series Development kit, PN Z8F04A28100KIT

MDS-GP Kit

- PN ZGENPRP0100MDS



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