

MDS General-Purpose Board

Product Brief

PB014602-0308

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

Zilog's General-Purpose MDS application board (MDS-GP) provides a convenient and powerful peripheral platform for use with Z8 Encore! XP[®] 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 RS-232 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

Key features of General-Purpose MDS application board include:

- Supports the Z8 Encore! XP 64xx and Z8 Encore! XP F0822 Series MDS CPU modules
- Supports the eZ80Acclaim! eZ80F91 MDS CPU module
- 2 x 16 Character LCD display
- 3 x 4 Keypad matrix
- 512 KB Fast SRAM
- Both 5 and 9 V to 12 V DC input jacks
- RS-485 interface/screw terminal block I/O +12 V, D+, D-, GND (power can be supplied to the board using this 12 V input)
- Terminal block inputs for some ADC channels on the Z8 Encore! XP family
- 6 high-drive outputs with terminal blocks. Jumper selectable 5 V or 12 V supply
- Footprints for two relays with terminal block access
- Plug-in for Trimble's Lasso SQ GPS module
- Plug-in for Maxstream (900 MHz or 2.4 GHz) 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 RS-232 ports
- Pot control for one ADC channel
- Footprint for Dinsmore 1490 Digital Compass
- Software or jumper-controllable RS-232 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 displays the functional diagram of the MDS-GP board.

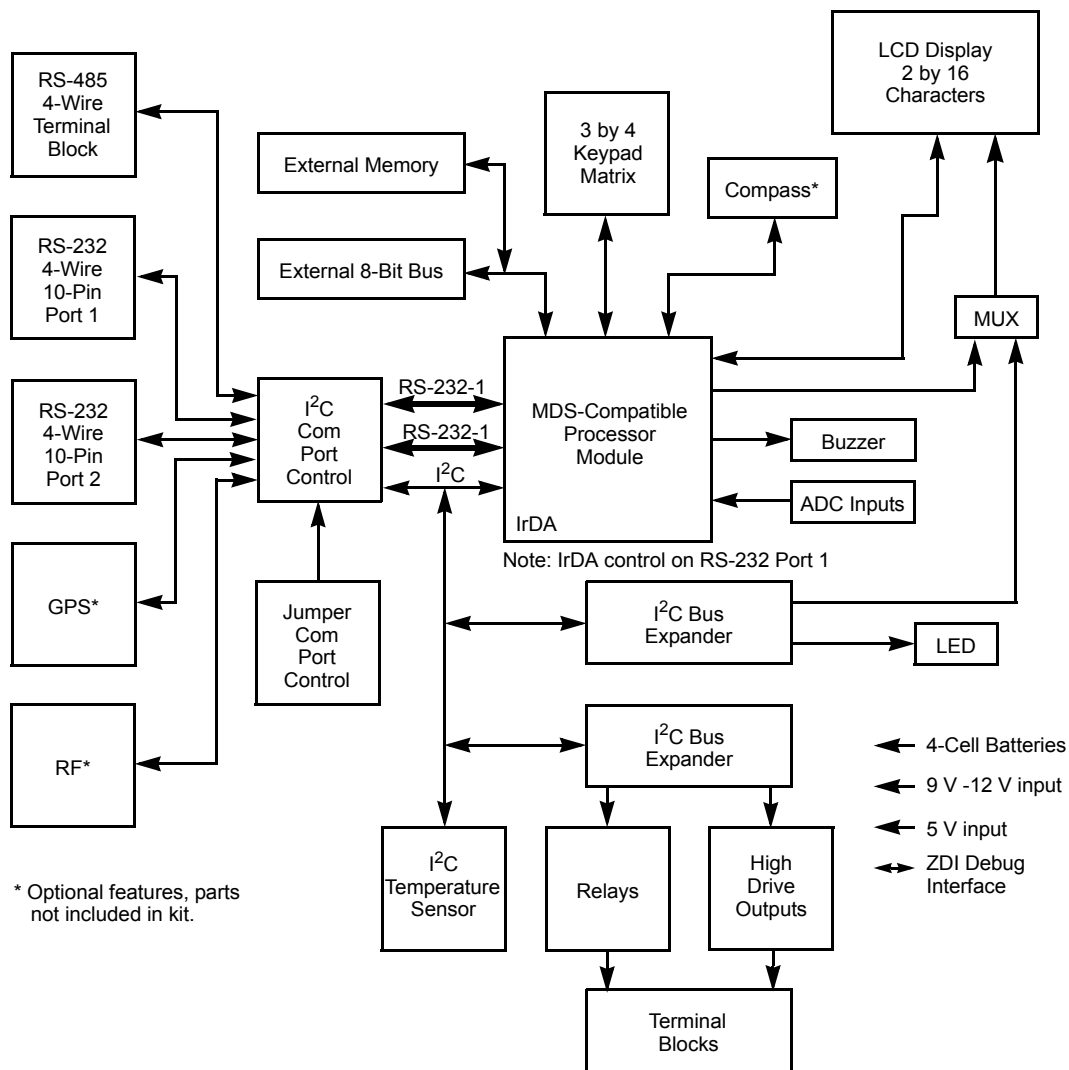


Figure 1. MDS-GP Functional Block Diagram

Kit Contents

- MDS-GP Application Board
- Zilog® CD-ROM containing example projects
- Quick Start Guide and supported documentation
- 10 Pin to DB9 Serial Cable

Ordering Information

Order the MDS-GP board and related products from Zilog®, providing the following part numbers. For more information regarding ordering, consult your local Zilog sales office. The Zilog website (www.zilog.com) lists all regional offices and provides additional Z8 Encore! XP® product information.

eZ80Acclaim!®

- eZ80F91 Development Kit, PN eZ80F910300ZCOG (eZ80F917050SBCG module is included)
- eZ80F91 module, eZ80F917050SBCG

Z8 Encore! XP®

- Z8 Encore! XP 64xx Series Flash Microcontrollers Development Kit, PN Z8F64200100KITG
- Z8 Encore! XP F0822 Series Flash Microcontrollers, PN Z8F04A28100KITG

MDS-GP Kit

- PN ZGENPRP0100MDS



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