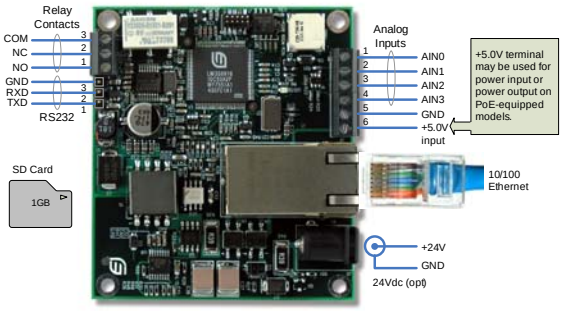
Stellaris® Ethernet-Enabled Intelligent Display Modules

The compact Stellaris® Intelligent Display Modules (MDL-IDM and MDL-IDM28) offer a complete graphical touch-screen user interface solution for control, automation, and instrumentation applications. While the Stellaris MDL-IDM and MDL-IDM28 both offer Ethernet connectivity, the MDL-IDM adds the benefit of optional Power-over-Ethernet (PoE), allowing the MDL-IDM to offer a simple method to produce intelligent terminals that can be simultaneously powered and network-connected by a single CAT5 Ethernet cable. Both the MDL-IDM and MDL-IDM28 feature additional serial connectivity options for easy implementation as a Human Machine Interface (HMI) touch display panel in an embedded control device. The Stellaris® IDMs are the first display modules available with efficient performance and robust integration of an ARM® Cortex™-M3 microcontroller, positioning the modules into building access controllers and security systems, intelligent white goods and home appliances, thin clients, and factory automation applications.

Features



The MDL-IDM and MDL-IDM28 both ship as a software-customizable module with the following features:

- Bright QVGA LCD touch-screen display
  - 16-bit color, 2.8" QVGA 240 x 320 pixels
  - White LED backlight with resistive touch panel
- Ethernet and serial connectivity options
  - 10/100 Ethernet with Auto MDI/MDIX and Traffic /Link indicator LED
  - Header provides TXD and RXD signals
  - RS232 signal levels
  - Default 115.2k,8,n,1 operation
- High performance microcontroller and large memory
  - 32-bit ARM® Cortex™-M3 core
  - 256 KB Main Flash memory, 64 KB SRAM
  - 168 KB Image RAM
  - microSD slot
- Flexible power supply options
  - IEEE 802.3af-compliant Power-over-Ethernet (MDL-IDM only)
  - 24 V DC power jack, 5 V DC terminals
- Easy to customize
  - Includes full source code, example applications, and design files
  - Reprogram over Ethernet using Stellaris Bootloader
  - Develop using tools supporting the IDM from Keil, IAR, Code Sourcery, and Code Red (using a Sellaris evaluation kit or preferred ARM Cortex-M3 debugger)
  - Supported by Stellaris Graphics Library and Stellaris® Peripheral Driver Library

Reference Design Kit

In addition to being offered as stand-alone, ready-for-production modules (MDL-IDM and MDL-IDM28), Stellaris® IDMs are also offered as a complete open-tool reference design kit (RDK-IDM). Supporting both the MDL-IDM and MDL-IDM28 designs, the RDK ships with everything needed to quickly evaluate and easily customize the IDM for your specific application, including:

- Stellaris® Intelligent LCD Module (MDL-IDM)
- 24 V power supply with international plug adapters
- Retractable Ethernet cable
- Debug adapter
- Quickstart Guide, User's Manual, Software Reference Manual, Board Data Sheet, source code, BOM, schematics, and Gerber files on CD

Ordering Information

Product Number	Description
MDL-IDM	Stellaris® Ethernet-Enabled Intelligent Display Module (with POE) for Single-Unit Packaging
MDL-IDM-B	Stellaris® Ethernet-Enabled Intelligent Display Module (with POE) for Volume Packaging
MDL-IDM28	Stellaris® Ethernet-Enabled Intelligent Display Module for Single-Unit Packaging
MDL-IDM28-B	Stellaris® Ethernet-Enabled Intelligent Display Module for Volume Packaging
RDK-IDM	Stellaris® Ethernet-Enabled Intelligent Display Module Reference Design Kit (RDK)

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