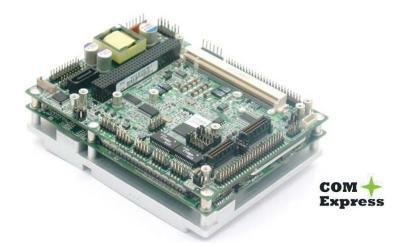
# Magellan<sup>™</sup> SBC



COM Express<sup>™</sup> form-factor Embedded-Ready Subsystem with SUMIT<sup>™,</sup> PC-104<sup>™</sup> and FeaturePak<sup>™</sup> expansion and configurable COM CPU



## Highly Integrated Embedded-Ready Subsystem (ERS)

Magellan integrates an I/O application layer, COM layer, and thermal layer into a compact, COM Express form-factor board-level subsystem.

## Price/Performance Advantage

Magellan offers a configurable COM Express CPU so you to match a Magellan ERS to the price/performance needs of your application.

#### Access to Latest Technology

Magellan's COM-based design provides you with access to the latest CPU and I/O technology, while protecting your investment from CPU obsolescence via plug compatible COM Express CPU modules.

#### Fast Time-to-Market

Magellan is a fully operational, off-the-shelf subsystem that is ready for immediate deployment in your application. No custom baseboard development is necessary.

#### **Development Kit**

Complete Development Kits are available with all the components you need to get started on your embedded design project. Each kit contains a Magellan ERS, cable kit, and Linux software CD.

## Software Support

Magellan runs Linux, Windows® XP<sup>™</sup>, Windows Embedded Standard<sup>™</sup> and Windows Embedded CE<sup>™</sup>. All necessary drivers are provided with the product.

#### **Key Features**

- Interchangeable COM Express CPU module provides price/performance flexibility and protects against product obsolescence
- ◆ Choice of 1.1GHz Intel® Atom<sup>™</sup> Z510 or 1.6GHz Intel Core 2 Duo<sup>™</sup> LV CPUs
- Supports up to 4GB of DDR2 SDRAM (CPU dependent)
- I/O connectors for a wide range of interfaces, including:
  - Dual gigabit Ethernet LANs
  - One SATA port
  - Four USB 2.0 ports
  - Two RS-232 serial ports
  - CRT and LVDS video output
- ♦ On-board USB flashdisk socket
- Supports connection of a wide variety of displays, including CRTs, LVDSinterfaced flat panels, and televisions
- Triple-play system expansion flexibility:
  PC/104 stack
  - SUMIT stack
  - FeaturePak zero height expansion socket
- Built-in +7-36 DC/DC power supply or +12VDC input only (LC models).
   Power is supplied by means of a six-pin terminal block
- Heatspreader is mounted on bottom side, promoting optimal thermal amangement and increasing space for I/O functions and connectors
- Extremely rugged operating temperature of -40°C to +85°C





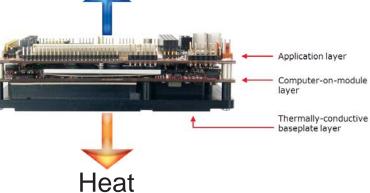
#### SPECIFICATIONS

SPECIFICATIONS	
Processor	Choice of 1.1GHz Intel Atom Z510 or 1.6GHz Intel Core 2 Duo LV CPU
Front side bus	Atom Z510: 400MHz Core 2 Duo LV: 800MHz
Memory	Atom Z510: 1GB soldered-on DDR2 SDRAM Core 2 Duo LV: 1 GB or 4GB SO-DIMM DDR2
Chipset	Atom Z510: US15WPT Core 2 Duo LV: 965GME with ICH8M
BIOS	AMI PnP Flash BIOS
Mass storage	1 SATA port, supports 1 device USB flashdisk socket
Serial ports	2 RS-232 ports 2 RS-232/422/485 ports
USB ports	4 USB 2.0
Networking	1 gigabit Ethernet from COM CPU 1 gigabit Ethernet from Intel 82574 controller on baseboard
Display	VGA CRT, LVDS LCD
Audio	AC'97 audio CODEC; mic in, line in/out
Watchdog timer	Non-maskable interrupt or reset modes
Other I/O	SMBus; LPC interface
Expansion buses	PC/104 or SUMIT stackable expansion FeaturePak socket
On-board power supply	+7-36V DC/DC power supply or +12V input only (LC models)
Power input	+12VDC or +7-36V DC/DC
Power consumption	MAG-Z510-1G: 10.3W idle, 14.2W loaded MAG-965-xG: 14.2W idle, 23.5W loaded
Operating temperature	-40°C to +85°C (-40°F to +185°F)
Operating humidity	0-90% non-condensing
Dimensions (L x W x H)	MAG-Z510-1G: 4.9 x 3.7 x 1.77 in. (125 x 95 x 57 mm) MAG-965-xG: 4.9 x 3.7 x 2.24 in. (125 x 95 x 57 mm)
Weight	MAG-Z510-1G: 11.7oz (332g) MAG-965-1G: 19.2oz (544g)
RoHS	Compliant

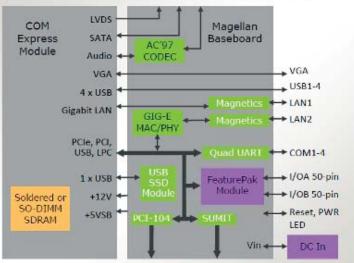
#### ORDERING INFORMATION

MAG-965-LC-4G	Magellan ERS, 1.6GHz Core 2 Duo LV CPU, 4GB SO-DIMM SDRAM, heatspreader, +12V input only
MAG-965-LC-1G	Magellan ERS, 1.6GHz Core 2 Duo LV CPU, 1GB SO-DIMM SDRAM, heatspreader, +12V input only
MAG-Z510-1G	Magellan ERS, 1.1GHz Atom Z510 CPU, 1GB soldered-on SDRAM, heatspreader
MAG-Z510LC-1G	Magellan ERS, 1.1GHz Atom Z510 CPU, 1GB soldered-on SDRAM, heatspreader, +12V input only
DK-MAG965LC-1G	Magellan 965LC Development Kit, includes: MAG-965LC-1G with heatsink & fan, cable kit, Linux image
DK-MAG-Z510-1G	Magellan Z510 Development Kit, includes: MAG- Z510-1G, cable kit, Linux image





**Block Diagram** 



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