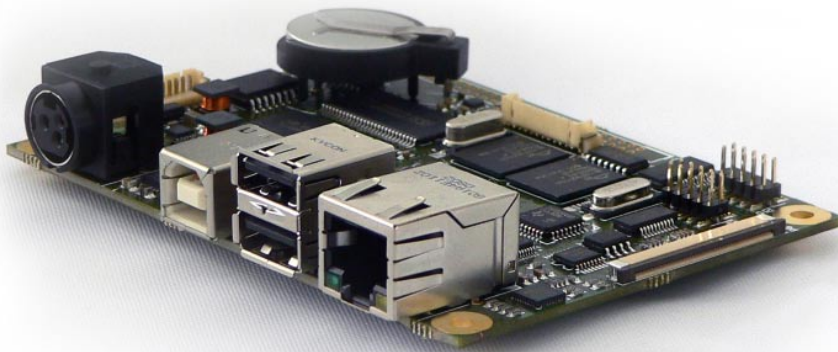


KEY FEATURES

- ▶ Very low power RISC based processor - typical power profile of under 1.5W
- ▶ Four USB host ports
- ▶ One USB device port
- ▶ Two RS232 and RS485 serial ports
- ▶ 12 off GPIO channels
- ▶ Single wide range voltage operation

CABLING KIT

- | | |
|--------------------------------|--------------|
| ▶ Audio Cable | PN 1371-1421 |
| ▶ Cable for USB 3 & 4 | PN 1371-1424 |
| ▶ RS232 Cable | PN 1371-1425 |
| ▶ RS232/422/485 Cable | PN 1371-1426 |
| ▶ Utility Cable | PN 1371-1423 |
| ▶ Misc Cable (I2S, GPIO, IRDA) | PN 1371-1422 |
| ▶ PSU Cable | PN 1193-1110 |



RE1 SINGLE BOARD COMPUTER

Based on a high integration system-on-a-chip (SOC) processor RISC core, the RE1 combines computing performance, I/O flexibility with an incredibly low power budget.

Board power dissipation starts at 1.5 watts at 333MHz and 2 watts at 500MHz making RE1 base an ideal candidate for operation via Power Over Ethernet (POE). An extended temperature range of -40°C to +85°C at 333MHz gives the unit an edge in rugged environments. Key hardware features include SDRAM and Flash memory, Serial Ports (3), Ethernet, Audio, Touch Screen, optional SD or Compact Flash, USB Host Port (4), USB Device Port (1) and 12 TTL general purpose I/Os. These standard I/O interfaces and features are made available on standard connectors on the back side of the main CPU board. Software drivers are provided for each of these I/O functions.

We've included an 8 bit expansion interface for customers to add custom I/O designs enhancing the flexibility of the RE1. We can design to custom requirements or provide the board schematics and expertise to support you own designs. All of this functionality has been designed into a board slightly bigger than a playing card.

The RE1 single board computer (SBC) has been designed to be used with the RESolution display kit, bringing together all the basic building blocks needed for a versatile embedded HMI module.

RE 1 SINGLE BOARD COMPUTER TECHNICAL SPECIFICATION

System

- ▶ RISC CPU at 333MHz or 500MHz
- ▶ 64MB on board SDRAM
- ▶ 32MB of Flash memory on the PC
- ▶ Customer Splash screen option

Local Storage

- ▶ Provision for Compact Flash or SD card
- ▶ Provision for USB flash drives

Operating System Support

- ▶ Windows CE 6.0.
- ▶ Linux
- ▶ QNX and VX Works - please consult with Sales

Local Area Network

- ▶ 10/100 Ethernet

Expansion

- ▶ 8 bit PC104 style expansion bus with stackable connection

Enhanced IO

- ▶ Four USB host ports
- ▶ One USB device port
- ▶ Two UART RS232 and one RS485 compatible serial port
- ▶ One IrDA (header)
- ▶ 13 TTL I/O /keypad operation (mix/match) some a Customer Splash screen option
- ▶ System Status LED

Display/Audio

- ▶ Colour TFT and interfaces
- ▶ Resolutions up to 800x600 will be supported
- ▶ Support for a 4 wire resistive touch panel
- ▶ Stereo line out, stereo line in and microphone
- ▶ Supporting PB1 adaptor board available

Power

- ▶ Single 7V to 36V supply
- ▶ Power management and suspend-mode operation

System Management

- ▶ Watchdog Timer
- ▶ Real time clock with battery back up support

Environmentals/Mechanicals

- ▶ 70 x 100mm with four corner mounting
- ▶ Operating temperature range :
Normal 0°C to +70°C
Extended -40°C to +85°C option
- ▶ Storage temperature range
- ▶ Relative humidity: 10 - 90% non-condensing
- ▶ Vibration
10Hz to 55Hz at 2mm displacement
55Hz to 150Hz at 2g peak acceleration
- ▶ EMC
EN55022 Class A – Emissions.
EN55024 Susceptibility.
- ▶ Designed to meet FCC Class B, certifications on request
- ▶ Safety
EN60950
UL60950 Third edition