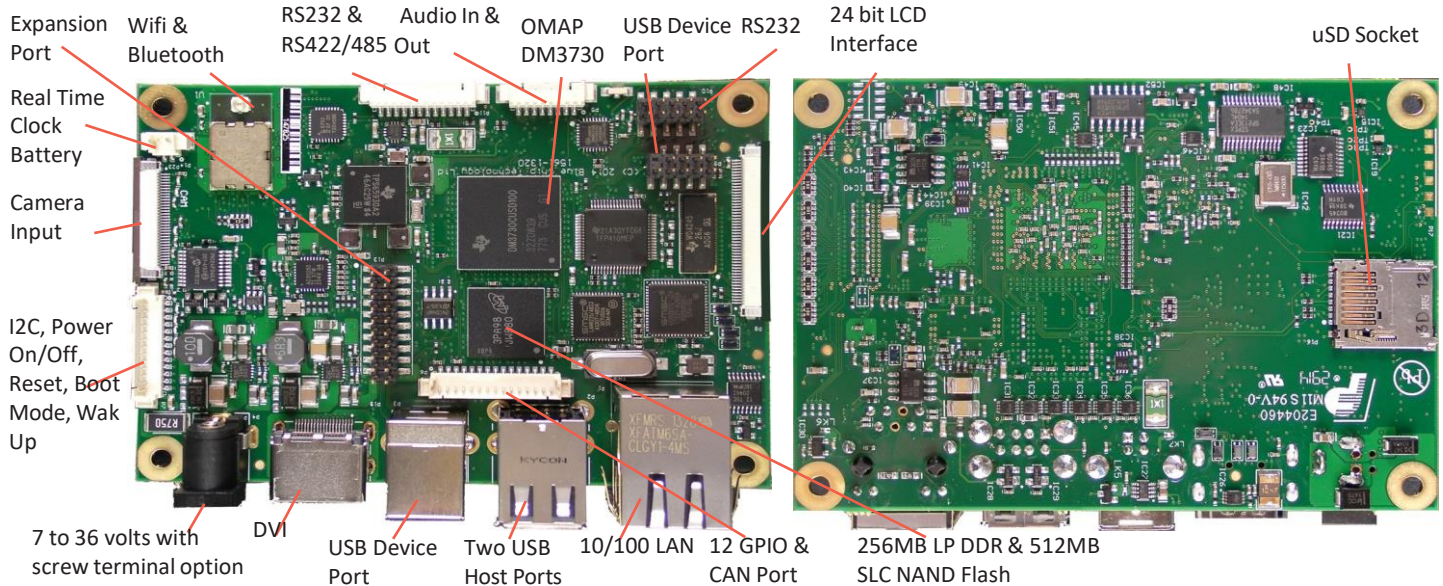


RE2

OMAP Cortex A8 All in One Computer PRODUCT INFORMATION



RE2 - For the Engineers



RE2 - The Headlines

- ▶ Cortex A8 1GHz CPU- 600/800MHz selectable
- ▶ Onboard Texas Instruments DSP
- ▶ Neon Floating Point
- ▶ Power VR Graphics Engine with Open GL ES Support
- ▶ H.264 720p30 video decode
- ▶ 256MB LPDDR Memory
- ▶ 512MB NAND Flash plus uSD Socket for more storage
- ▶ Video outputs include DVI/HDMI or 24 bit LCD
- ▶ Onboard Wifi 802.11b/g and Bluetooth
- ▶ 10/100 Mbit LAN
- ▶ Four USB 2.0 Type A Host ports & one USB Device port
- ▶ Stereo Audio Input
- ▶ Dual RS232 ports (one full implementation and one RX/TX)
- ▶ Single RS422/485 port DigitalCamera input
- ▶ 12 General Purpose Input/Output Signals
- ▶ Expansion connector for Camera, Modems, GPS options
- ▶ Linux, Android and Windows CE 6.0 & EC7
- ▶ Wide Input Voltage Range - 7 to 36 volts DC
- ▶ Standard and Extended Temperature Options
- ▶ Ultra Compact Size - 70 x 100mm
- ▶ Designed, Manufactured and Technical Support in the UK

RE2 - In a few words

The RE2 is one of our most successful products and has now been revised to be available until at least 2021. Offering unrivalled functionality combined with low power consumption the RE2 is the ideal engine for your new product. Available with Windows, Linux and Android operating systems the RE2 cuts development times and reduces risks to get your new product to market as quickly as possible.

Designed and manufactured at Blue Chip Technology's facility in the heart of the UK the RE2 is available as a board, kit with a range of LCDs and also integrated into packaged solutions. If you need a custom solution we can combine the core of the RE2 together with your chosen peripherals to create a custom solution just for you.



RE2

OMAP Cortex A8 All in One Computer PRODUCT INFORMATION



Processors & Memory

- ▶ Processor - Texas Instruments DM3730
 - CPU Technology Cortex™ A8
 - CPU Cores 1
 - CPU Clock Speed 1GHz
 - L1 Cache 64KB
 - L2 Cache 256KB
 - Coprocessor NEON Floating Point
- ▶ Digital Signal Processor - Texas Instruments C64x
 - Instruction Type Fixed Point
 - Speed 800MHz
- ▶ Memory
 - Technology Low Power DDR
 - Capacity 256MB

Graphics

- ▶ Graphics Acceleration
 - 3D
- ▶ Video Codecs
 - H.264-BP, H.264-MP/HP
 - JPEG, MPEG2-MP
 - MPEG4-SP, VC1
- ▶ Video Resolution/Frame Rate
 - D1 or Less
 - 720p
- ▶ Audio Codecs
 - AAC-HE, AAC-LC, G.711
 - MP3, WMA

Multimedia Inputs/Outputs

- ▶ DVI (HDMI connector for compactness)
- ▶ 24 bit RGB CMOS/TTL with 4 wire Resistive Touch Screen Controller
- ▶ Stereo Audio Inputs & Stereo Outputs plus Microphone In

Touch Screen

- ▶ 4 wire resistive touch screen controller
- ▶ I2C interface for Projected Capacitive touch screens

** Please contact Blue Chip Technology Sales for the latest information*

RE2 Product Information - Version 1.4

Communications

- ▶ 10/100 Mbit LAN
- ▶ Four USB 2.0 Hosts (1.1 compliant)
- ▶ One USB 2.0 Device Port
- ▶ Dual RS232 ports, one with full modem handshaking
- ▶ RS422/485 port with optional termination
- ▶ Wi-Fi 802.11 b/g & Bluetooth (UFL connector)
- ▶ Optional - 2G/3G Modem, GPS, via expansion port

Storage

- ▶ 512MB SLC NAND Flash
- ▶ MicroSD Socket

Camera Interface

- ▶ Digital BT656 compliant interface

Expansion and General Interfacing

- ▶ Expansion header for 2G/3G Modem, GPS, Camera, etc
- ▶ 12 GPIO Signals
- ▶ I2C & IrDA
- ▶ Real Time Clock (external 3.7 volt battery required)
- ▶ Watchdog

Operating System Support *

- ▶ Ubuntu Linux 12.04 LTS
- ▶ Microsoft Windows CE 6.0 & Embedded Compact 7
- ▶ Android

Environmentals/Mechanicals

- ▶ Operating Temperatures
 - Standard 0°C to 70°C
 - Extended -40°C to 85°C
- ▶ Humidity 20% to 80% non-condensing
- ▶ EMC
 - Emissions EN55022 (A)
 - Immunity EN55024
 - R&TTE
 - Safety EN60950
- ▶ Dimensions 70 x 100mm (four corner mounts)

Power

- ▶ Input Voltage 7 to 36 Volts DC
- ▶ Power Consumption 2 watts
- ▶ Connector Jack plug or Screw Terminal