



#### Embest - Mini8100 - Mini8100 Processor Card

## **Product Overview:**

Embest Mini8100 processor card is designed specially to be the heart of your next embedded design. The tiny board integrates TI OMAP3530 processor (ARM Cortex-A8 Core ~600MHz paired with TMS320C64x+ DSP ~430MHz). The processor card takes use of all common features of OMAP3530 and the connection between the processor card and your carrierboard is through two 1.27mm space 90-pin biserial dip connectors. 16-bit data bus, I/O and all other hardware interfaces are all expanded via these two connectors. The fully expansion can be used adapted to customer requirements.



Integration of the Embest Mini8100 processor card to customer special design is fully supported by Embest technologies. Embest also designed an expansion board which can fully evaluate Mini8100. The whole system is called SBC8100. Embest offers Linux 2.6.22 and WinCE6.0 BSP for this board. Customers can leverage our experience to increase your own productivity. The optimal embedded microprocessor solution provides users with a flexible development environment based on OMAP3530 and a shortened development timeframe.

## **Key Features:**

Dimensions: 59mm x 37mm

Temperature: 0~+70

- TI OMAP3530 processor
- 600-MHz ARM Cortex<sup>™</sup>-A8 Core
- 412-MHz TMS320C64x+™ DSP Core
- 128MByte DDR SDRAM, 166MHz, 128MByte NAND Flash (256MB DDR SDRAM +256MB NAND Flash is compatible)
- 32768Hz RTC (Real-time clock)
- 12-bit Camera interface (support analog camera)
- 2-channel SPI
- GPMC bus (16-bit data bus, 10-bit address bus, 4 chip-selection signals and several control signals)
- 3-channel 5-wire UARTs
- 1-channel ULPI (USB1 HS)
- Audio in/out



- 1-channel I2C
- 2-channel McBSP (McBSP1 and McBSP3, McBSP3 is multiplex with UART2)
- 2-channel SD/MMC: MMC1 (8-wire), MMC2 (4-wire)
- 24-bit DSS interface
- Single 3.3V power supply

# **Ordering Information:**

#### **Products:**

Part Number	Manufacturer	Farnell P/N	Newark P/N	
Mini8100	Embest	NA	63R5731	

## **Associated Products:**

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
XOMAP3530BCBB	TI	High-performance, Applications Processor	1660215	85M0392
SPC19944	SPC Technology	Shielded Serial Cable Assembly	1702771	83K3689
SPC15457	SPC Technology	Standard 9 Pin D-Subminiature Connector	1653954	79K5032
SPC21961	SPC Technology	Category 5e Cable Assembly	1363809	21M5875
555052-1	Tyco Electronics	RJ45 JACK	1557068	66F3284
897-43-004-90-000000	Mill Max	USB Connector	1621546	84K7068

#### **Similar Products:**

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
ADZS-BFFPGA-EZEXT	ADI	Blackfin Daughter	Blackfin	1642833	28M3960
		Card			
ADZS-DBAGENT-BRD	ADI	Blackfin Daughter	Blackfin	1776226	19P8256
		Card			
TMDSADPEMU-20T	TI	DM644x Daughter	DM644X	1714837	94M9961
		Card			



# **Document List:**

#### **Datasheets:**

Part Number	Description	Size
MAX3232	RS-232 Transceivers	752KB
LM1117DT-ADJ	800mA Low-Dropout Linear Regulator	647KB
OMAP3530	OMAP3530/25 Applications Processor	3.5MB

# **Application Notes:**

File Name	Size
Power Management Techniques for OMAP35x Applications Processors White Paper	142KB
Running a TMS320C64x+ Codec Across TMS320C64x+ Based DSP Platforms	969KB
Using TI's Embedded Processor Software Toolkit for Medical Diagnostic Ultrasound	2.38MB
Powering OMAP™3 With TPS65023: Design-In Guide	828KB
OMAP35x Technical Reference Manual	237KB

