



ATMEL - ATEVK1104 - AVR32 EVK1104 Evaluation Kit

Product Overview:

The AVR32 EVK1104 is an evaluation kit for the AT32UC3A3256 which combines Atmel's state of art AVR32 microcontroller with an unrivalled selection of communication interface like USB device including On-The-Go functionality, SDcard, NAND flash with ECC and stereo 16-bit DAC.



Kit Contents:

The AVR32 EVK1104 contains the hardware and software essentials you will need to use it. The items in the EVK and their use are as follows.

- AVR32 EVK1104
- AVR32-SoftwareFramework-AT32UC3A3-0.7.0

Key Features:

- High Performance, Low Power AVR@32 UC 32-Bit Microcontroller
- Multi-Layer Bus System
- Internal High-Speed Flash
- Internal High-Speed SRAM
- Interrupt Controller
- Power and Clock Manager Including Internal RC Clock and One 32KHz Oscillator
- Two Multipurpose Oscillators and Two Phase-Lock-Loop (PLL),
- Watchdog Timer, Real-Time Clock Timer
- External Memories
- MultiMediaCard (MMC), Secure-Digital (SD), SDIO V1.1
- CE-ATA, FastSD, SmartMedia, Compact Flash
- Memory Stick: Standard Format V1.40, PRO Format V1.00, Micro
- IDE Interface
- One Advanced Encryption System (AES) for AT32UC3A3256S, AT32UC3A3128S and AT32UC3A364S
- Universal Serial Bus (USB)
- One 8-channel 10-bit Analog-To-Digital Converter, multiplexed with Digital IOs.
- Two Three-Channel 16-bit Timer/Counter (TC)

- Four Universal Synchronous/Asynchronous Receiver/Transmitters (USART)
- Two Master/Slave Serial Peripheral Interfaces (SPI) with Chip Select Signals
- One Synchronous Serial Protocol Controller
- Two Master/Slave Two-Wire Interface (TWI), 400kbit/s I2C-compatible
- On-Chip Debug System (JTAG interface)
- 110 General Purpose Input/Output (GPIOs)
- 144-pin TBGA and LQFP
- Single 3.3V Power Supply

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
ATEVK1104	Atmel	1715477	15R0260

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
AVRONE-PSU	Atmel	PSU for AVRONE	1715521	15R0340
ATJTAGICE2	Atmel	Development Kit, Debug Tool	9171100	23M5050
ATJTAGICE2 - JMS2206	Atmel	Test Board Kit, Combo	1526599	73M8851
AT32UC3A3256-AL UT	Atmel	MCU,32BIT,AVR32,256K FLASH, 144LQFP	1715452	15R0316
AT45DB642D-TU	Atmel	Data Flash 64MB	1095799	89K8481
MT48LC16M16A2P- 75:D	Micron	SDRAM 256MB	1216280	97K6120
TPS2112APW	TI	Multiplexer IC	1412179	01J0958
TPS62040DRCR	TI	TPS62040DRC - 1.2 A 1.25 MHZ, High Efficiency	1412547	87H2901
QT60168-ASG	Atmel	Touch sensor	1099146	97K8272
TPS2021D	TI	Power distribution switches	1755292	62M0669
TPA6130A2RTJR	TI	Amplifier with I2C volume control	1575067	34M0132
AT32UC3B1256-AU T	Atmel	MCU,32BIT,AVR32,256K FLASH,48TQFP	1715454	15R0318

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
ATEVK1100	Atmel	KIT, Evaluation for AVR32 AT32UC3A	AVR32 AT32UC3A	1629540	02P6232
ATEVK1105	Atmel	KIT, Evaluation for AVR32 AT32UC3A	AVR32 AT32UC3A	1715478	15R0261
ATSTK600	Atmel	ATSTK600 - Development Tools & Eval/Demo	AT32UC3B164, Tmega168, AT32UC3A0512	NA	94M6265

Document List:

Datasheets:

Part Number	Description	Size
AT32UC3A0512	AVR32 32-Bit Microcontroller	655.6KB
AT45DB642D	AT45DB642D 64-megabit 2.7V Dual-interface DataFlash	1.37MB
AVR32UC	AVR32UC Technical Reference Manual	1.18MB
MT48LC16M16A2	MT48LC16M16A2 Synchronous Dram	1.47MB
QProx QT60168	QProx QT60168, QT60248 16,24 Key QMatrix IC	867KB
TPS2112	TPS2112 Autoswitching Power Aux	164KB
TPS62040DRC	TPS62040DRC - 1.2 A 1.25 MHz, High Efficiency	372KB
TPA6130A2RTJ	138-mW Directpath stereo headphone amplifier with I2C volume control	1.16MB

Application Notes:

File Name	Size
AVR32 How to use the SSC in I2S mode	116KB
AVR32 UC3A3 High Speed USB Design Guidelines	88KB
AVR and AVR32 - Quick Reference Guide	9.78MB
AVR JTAGICE mkII On-Chip Debug System	348KB
AVR JTAGICE mkII Quick Start Guide	100KB
Designing for Efficient Production with In-System Re-programmable Flash Microcontrollers	228KB
How to Compile the standalone AVR32 Software Framework in AVR32 Studio V2	302KB
JTAGICE mkII Communication Protocol	0.98MB

UC3A3 Schematic Checklist	284KB
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Hardware & Software:

File Name	Size
AVR32-SoftwareFramework-AT32UC3A3-0.7.0	28.6MB
EVK1104_Schematics_BOM	400KB