



## 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-ALUT	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-AUT	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	<a href="#">AVR32 32-Bit Microcontroller</a>	655.6KB
AT45DB642D	<a href="#">AT45DB642D 64-megabit 2.7V Dual-interface DataFlash</a>	1.37MB
AVR32UC	<a href="#">AVR32UC Technical Reference Manual</a>	1.18MB
MT48LC16M16A2	<a href="#">MT48LC16M16A2 Synchronous Dram</a>	1.47MB
QProx QT60168	<a href="#">QProx QT60168, QT60248 16,24 Key QMatrix IC</a>	867KB
TPS2112	<a href="#">TPS2112 Autoswitching Power Aux</a>	164KB
TPS62040DRC	<a href="#">TPS62040DRC - 1.2 A 1.25 MHz, High Efficiency</a>	372KB
TPA6130A2RTJ	<a href="#">138-mW Directpath stereo headphone amplifie with I2C volume control</a>	1.16MB

## Application Notes:

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

<a href="#">UC3A3 Schematic Checklist</a>	284KB
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## Hardware & Software:

File Name	Size
<a href="#">AVR32-SoftwareFramework-AT32UC3A3-0.7.0</a>	28.6MB
<a href="#">EVK1104_Schematics_BOM</a>	400KB

