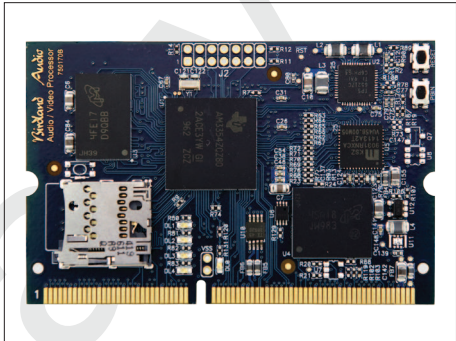# Audio-Video Network Processor

The BAV335x is a 32bit ARM Coretex A8 processor module complete with embedded DDR3 SDRAM, boot eMMC and Gigabit Ethernet in a convenient SODIMM-144 making it easy for OEMs to design Network appliances. These modules are designed around the very popular Texas-Instruments AM3354/AM3359 processors running at up to 1GHz with MMU. The module is available with Linux installed.

**BAV3354-B**
**BAV3359-B**

- Built-in PMIC generates all required voltages from single +5V input
- Embedded Gigabit Ethernet PHY with easy interface to external RJ45
- Built-in 512MB of DDR3 SDRAM and 4GB of built-in boot MMC
- Built-in micro-SD connector supports additional high capacity cards.
- Up to 73 GPIOs, 2 CANs, 2 USBs, UARTs, and triple I2C bus.
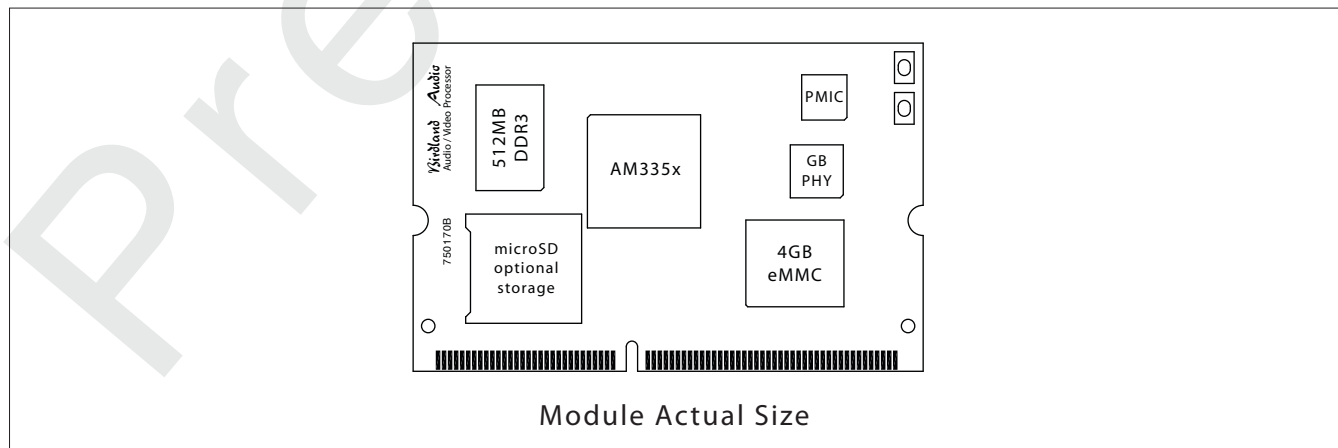- Optimized for 24 bit Video and multi-channel Audio.

The BAV335x is provided as a small board to be used with a single low profile, SODIMM mating connector. The module makes it easy for OEMs to integrate Texas-Instruments' powerful Sitara processor in their designs without having to worry about complex EMI and PCB layout typical of BGAs fine pitch designs, high-speed DDR3 with impedance and trace length matching considerations.

All voltages are handled on-board guaranteeing proper power-up/down sequencing of all required core voltages, from a single 5 Volt supply. The module is designed with OEMs in mind where full customization and reduced size is important. The single DIMM connector simplifies OEM design allowing custom placement of Ethernet and USB connectors were desired while keeping the PCB simple and low cost, without the need to exceed 4 layers.

A built-in micro-controller provides boostrap options, such as a power monitor useful for embedded network appliances, making sure the module power is always on, and a watchdog optimized for linux heartbeat.

A Powered-over-Ethernet evaluation board is available with, two 46 pin connectors compatible* with BeagleBone capes, 4 switches, and six 14-segment LED displays. For more information, contact oem@birdland.com.

Module Actual Size