DSP4YOU

AUB-SW

Typical applications

- Low cost 5 port switch
- OEM switch module or R&D platform
- AVB gateway for Lan/Wan

The AVB-SW is pocket size 5 port network switch for R&D and OEM use. Based on the Marvell Firefox series, it supports the latest Audio Video Bridging (AVB) for streaming synchronized Audio & Video over Ethernet networks.

With a 400MHz ARM9 processor at its core, the AVB-SW has many I/O (USB/SDCard/GPIO I2S/RS232). It is ready for expansion via firmware upgrade and was its hardware was engineered with future in mind. A flexible platform that is the perfect fit for a Plug & Play AVB development environment.

Last but not least, the AVB-SW is a an OEM friendly product. Don't re-invent the wheel and miss a deadline. A quick time to market is key to success in today's market. For information on potential OEM implementation and bulk order, please contact sales@dsp4you.com

Features
- Low cost AVB network switch
- Low power, small form factor
- Future proof with firmware upgrades coming up

Hardware
- Marvell 400MHz ARM9
- Dual 128Mbit Flash
- 1Gbit DDR2 SDRAM

Network
- AVB stack by Marvell for switch and end points
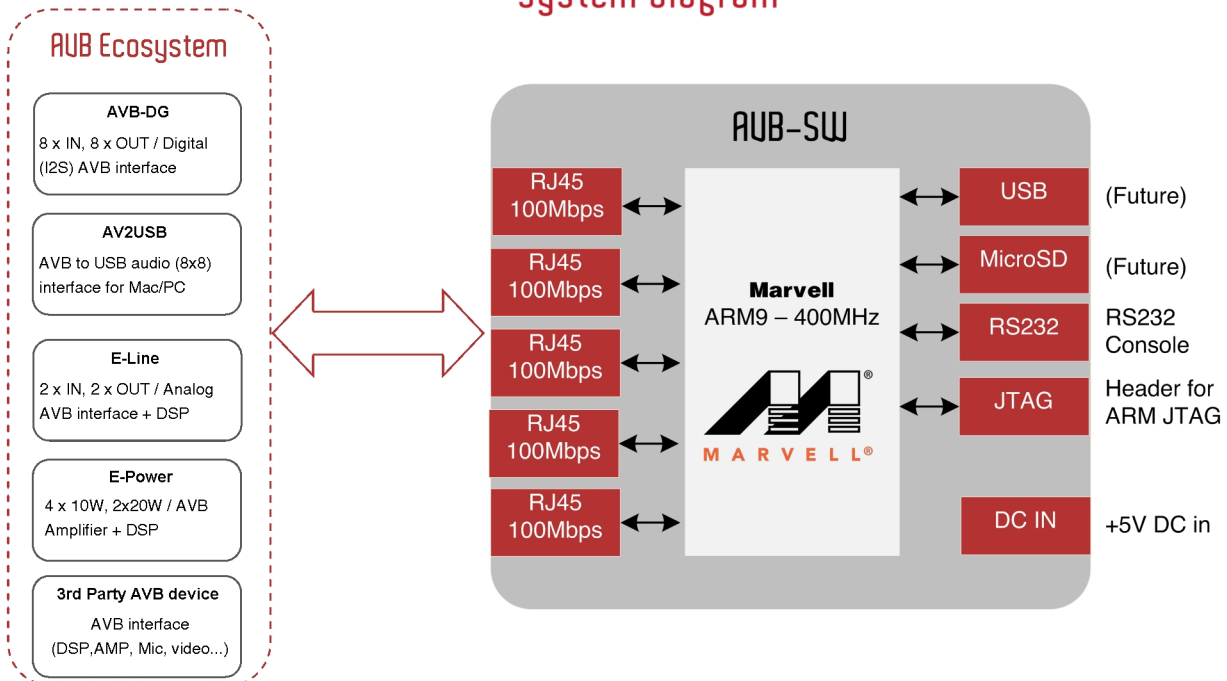- Gateway firmware to be released

Connectivity
- 5 port 10/100Mbps
- USB 2.0 type A
- microSD
- RS232 header

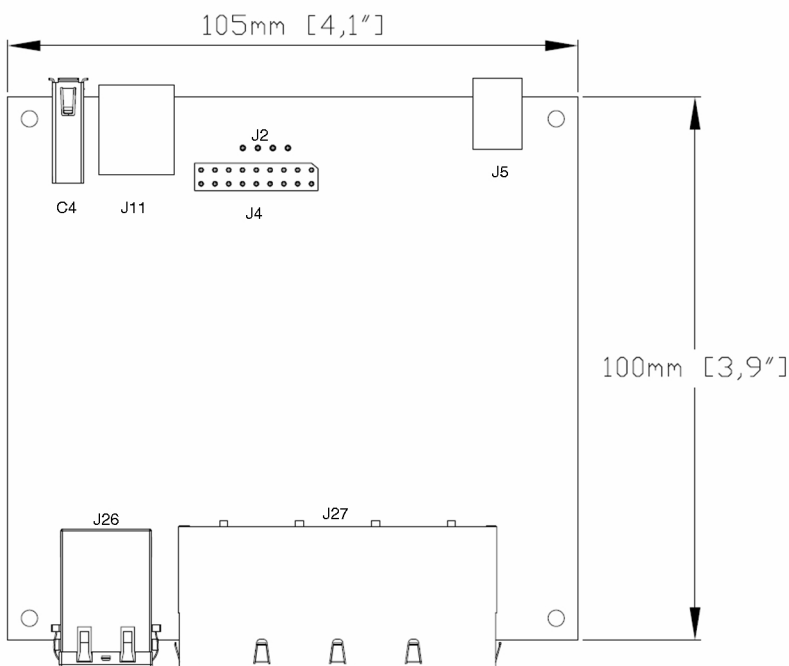### Power
- +5VDC external SMPS
- Only 3W @ 5VDC

System diagram

AUB Ecosystem

AVB-DG
8 x IN, 8 x OUT / Digital (I2S) AVB interface

AV2USB
AVB to USB audio (8x8) interface for Mac/PC

E-Line
2 x IN, 2 x OUT / Analog AVB interface + DSP

E-Power
4 x 10W, 2x20W / AVB Amplifier + DSP

3rd Party AVB device
AVB interface (DSP,AMP, Mic, video...)

AUB-SW

Left	Center	Right	Note
RJ45 100Mbps		USB	(Future)
RJ45 100Mbps		MicroSD	(Future)
RJ45 100Mbps	Marvell ARM9 – 400MHz	RS232	RS232 Console
RJ45 100Mbps	MARVELL®	JTAG	Header for ARM JTAG
RJ45 100Mbps		DC IN	+5V DC in

Features and Specifications are subject to change without prior notice

Technical specifications

Item	Description
Network Processor	400MHz ARM9 Marvell 88E7251
Network port	5 auto speed sensing 10/100 Mbps RJ45 ports
Network protocols and standards	IEEE 802.3i/u for 10/100BaseT IEEE 802.1AS, 802.1Qat, 802.1Qav for Audio Video Bridging standards
USB 2.0, microSD	USB 2.0 Type A plug (Future) - Host mode microSD card (future)
AVB Endpoint header (Future feature via firmware upgrade)	Internal 20pin 0.1" pitch connector with TDM/I2S input & output streaming AVBTP (IEEE 1722) talker listener mode • Up to 8ch per stream • Sample rate of 44.1/48/88.2/96/176.4/192kHz • Sample width of 20/24bit • Automatic hardware locking to stream's media using the IEEE 1722 presentation time
Front/Rear connectors	FRONT: 5 x RJ45 (4 x PoE+ ports in the GWP version) REAR: 1 x 2.1mm DC connector, 1 x MicroSD card, 1 x USB 2.0 connector
Power Supply	External +5VDC AC~DC converter 3W @ 5VDC no USB plugged in / 6W @ 5VDC with USB host
Weight	100gm
Dimensions (H x W x D) mm	31 x 129 x 108mm
Safety	CE Mark, CE/LVD
Warranty	1 year warranty
Mounting	4 x 3mm Diameter plated holes - Board provided on plastic standoffs

Mechanical specifications

Item	Description
C4	USB 2.0 Type A
J11	microSD card slot
J14	I2S data In/Out + Clocks See user manual for details
J2	RS232 connector for terminal interface
J5	DC input - 2.1mm
J27	4 x port Ethernet
J26	Single port Ethernet