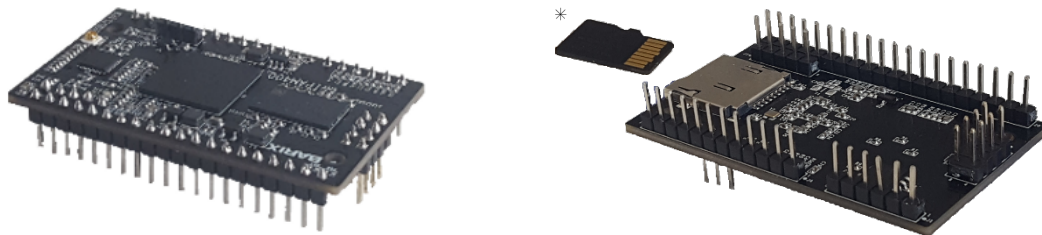


BARIX

IP AUDIO MODULE 400

Powerful and versatile audio module for OEM products, Linux based, with Quadcore Cortex™ A7 Processor, 3x USB interface, serial port, digital I/O, WiFi 802.11



* microSD card needs to be ordered

The IP Audio Module (IPAM) 400 is a powerful universal, standalone, Linux based IP Audio function block, which can be easily embedded into OEM products and programmed with the programming language of your choice including C++, LUA and PHYTON. Supporting a vast range of protocols, codecs and interfaces and providing on board memory as well as a μ SD card slot, the module is ideal for all audio related applications such as VoIP, IP intercom and paging as well as high quality music distribution.

10/100 Mbit Ethernet port, three USB interfaces a variety of I/Os as well as a serial and WiFi interface are provided. The Quadcore Cortex™ A7 processor allows for very fast encoding and packet handling and is performant enough to support all advanced security end encryption requirements.

OEM Applications

- Internet radio receiver
- SIP and IP paging devices
- Emergency call stations
- Intercom&Paging solutions
- Public transport installations
- Scheduling Audio
- VoIP decoder for paging
- Any kind of commercial audio
- AES67 capable IP audio device

Specification

- Quad-Core Cortex™ A7 Processor
 - 256MB DDR 3L memory
 - 128Mbit Flash memory
 - High performance CPU allows execution of software codecs for all common Audio codecs such as G.711, G.722, PCM linear, Ogg Vorbis, MP3, AAC+
 - Acoustic echo cancellation
 - Microphone/Line level stereo input
 - High quality stereo DAC with level control
 - SPDIF and I2S digital audio interface
 - SD/TFcard slot
 - TTL level UART
 - 7 General purpose I/Os, I2C interface
 - WiFi (for specification contact Barix)
-

Technical Specifications

Operation System

- Yocto (OpenEmbedded), Linux (Armbian) including update functionality
- IPv4/IPv6, security, full fledged linux

User Interface

- Web interface for control, status and configuration

Network Interfaces

- one physical layer (PHY)
- Ethernet interface, IPv4, IPv6 capable
- TCP/IP, RTP, UDP, ICMP, DHCP, SIP, SNMP
- 10/100 fdx/hdx, auto negotiation

WiFi Interface

- For specifications contact Barix

Power Requirements

- Single 3.3V DC supply voltage, +/- 5%, 2A max
- Separate Audio ground domain/connection

Serial Interface

- 2 x UART, one with hardware handshake (TTL level)
- 1 x USB 2.0 On-the-go
- 2 x USB 2.0 full/hi/low speed capable host

Memory, Cache

- 16MB SPI flash
- 32KB L1 Instruction cache, 32KB L1 data cache
- 512KB L2 cache
- VFPv4 Floating point unit
- LPAE and NEON advanced SIMD

CPUs / Boot

- Quad-Core ARM Cortex™ -A7 (clocked up to 1.29 Ghz)
- Separate NEON coprocessor
- supports fast boot process from Flash or SD/TF
- Crypto Engine Encryption type

Analog Audio

- 1 x Stereo Output (L&R)
- 1 x Microphone Input (balanced/unbalanced) or 1 x Stereo Input

Miscellaneous Interfaces

- I2S digital audio interface
- digital audio interface (S/PDIF)
- I2C interface

Peripheral I/O

- seven 3.3VDC level digital general purpose I/Os

Flash Memory (Micro SD)

- On-board uSD card socket (up to 32GB)

Reset functionality

- Reset and Recovery functions on hardware and software triggers

MTBF

- > 950'000h

Measurement

- 2.2" x 0.45" x 1.3" / 56.1mm x 11.44mm x 33mm

Weight

- 14g

Warranty

- Two years
-

Environmental

Operating Environment

0 to +50°C / 32 to 140°F environmental higher operating range with downclocking
0 - 70% relative humidity, non-condensing

Storage Conditions

0 to +70°C / 32 to 158°F
0 - 70% relative humidity, non-condensing

Certifications

- RoHS
- FCC ID: 2APAE-IPAM400 ⁽¹⁾
- CE
- RED

Ordering Information

2017_9225_IPAM400 OEM

For commercial related questions (distributors contacts, price list, business opportunities) please contact **sales@barix.com**

For technical inquiries (problem reports, request for documentation, etc.) please contact **support@barix.com**

Barix AG Ringstrasse 15A, 8600 Dübendorf, Switzerland, www.barix.com
info@barix.com, Phone: +41 43 43322 11



© Barix AG 2020, all rights reserved. All information is subject to change without notice.
All mentioned trademarks belong to their respective owners and are used for reference only. Product sheet V1.0
