

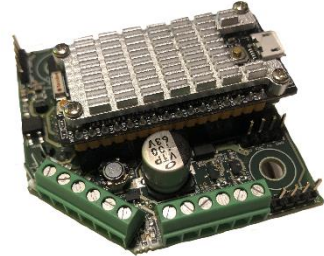
# FE-2X10W-SMOD (HW 2-0) - PRODUCT DATASHEET

BUILD-IN SPEKER SIP-AMPLIFIER MODULE 2X10W @POE+

## OEM-ready HW and SW

FE-2X10W-SMOD is a class-D amplifier build-in speaker Linux based SIP-module able to connect to SIP-server and get a phone call as standard SIP-extension.

Small dimension makes it possible to replace audio transformer and upgrade any passive speaker to SIP-Speaker. Audio files and voice messages can be streamed live or uploaded to device in order to play them later or periodically from build-in timer/scheduler. Auto-provisioning through IP-INTEGRA SIP-server saves time, especially in the case of large-scale installations. The module can easily integrate with 3<sup>rd</sup> parts SIP-systems through WEB interface and/or IP-INTEGRA SDK.



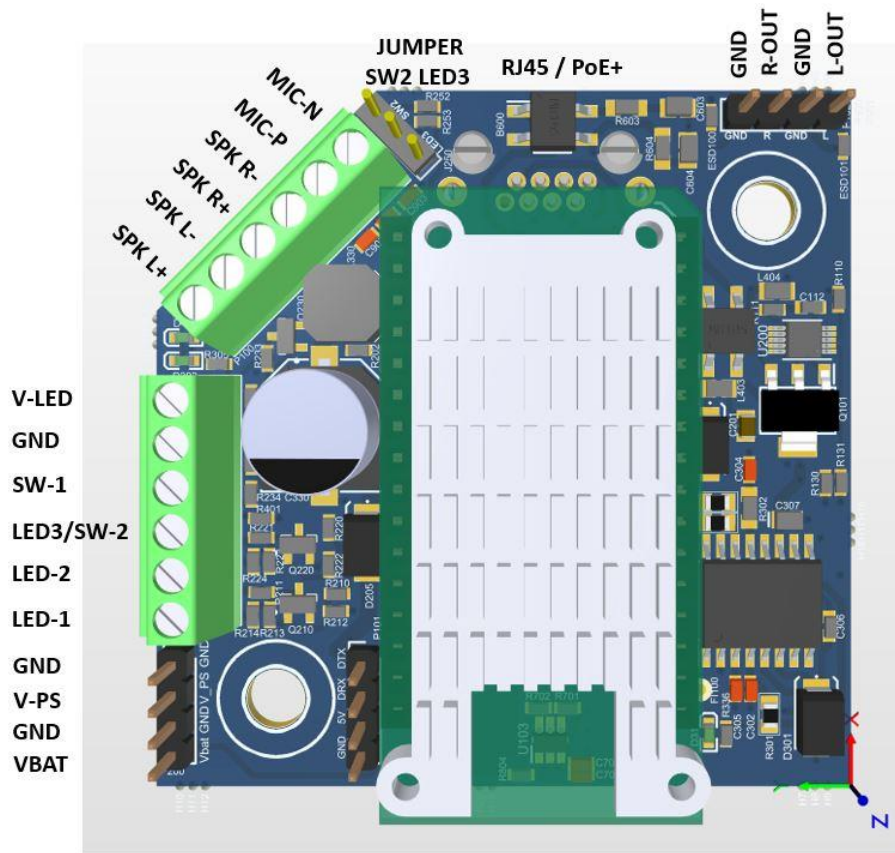
## Briefly

- Make your own -customizable IP-speaker or an IP-amplifier!
- Group Multicast and individual paging by dialing extension number
- Connect: 2 passive speakers, microphone, LED, I/O pins, USB
- Designed to wide response for music & speech in full quality.
- Easy SW setup through WEB interface & auto-provision

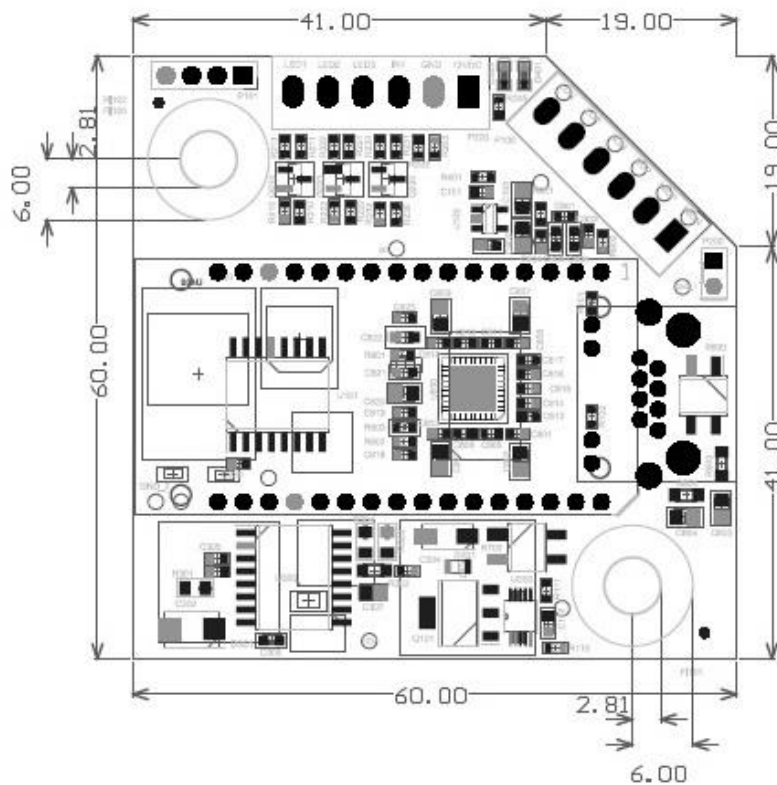
TECHNICAL SPECIFICATION	
<b>AUDIO</b>	
Internal audio amplifier	2x10 W class D
Low noise	-90dB
Efficiency	>90%
Audio Codecs	Mp3, PCM, G.729, G.722, GSM, A-law, u-law,
THD+N	0.1% @ PO = 5W, f = 1kHz, RL = 8Ω
<b>HARDWARE</b>	
Ethernet connector	1 x RJ 45
Power options	PoE +IEEE 802.3-at or ext. 15V-25V/2A DC
PoE	IEEE 802.3at
Power consumption	Idle 1.8W, max 24W (depending on volume)
CPU	Allwinner H2+, Quad-core Cortex A7

<b>SOFTWARE</b>	
Web-interface	Dashboard with HTTP based configuration, alarm settings
Sound adjustment	Echo-cancel, sound mute, silence suppression, paging start/stop tone, microphone boost/mute
Scheduler	Bulk adding, automatic fill-out, ring-tone upload
Remote provisioning	Automatic synchronizing of SIP-server scheduler and sound files; device discovery
Logging	Call, event and scheduler logs
<b>CONSTRUCTION</b>	
Dimension	60x60 - max. height 30 mm
<b>ENVIRONMENT</b>	
Operation temperature	-20°C to 70°C
Storage temperature	-40°C to 70°C
Humidity	10% to 95%, no dew
<b>INPUT/OUTPUT</b>	
Speaker output	4-8Ω, 2 X 10 W
Output	5VDC & 12VDC output, 3 X Open-Collector @ 2A, up to 15V (RGB LED drive)
Input	1 X switch button (option for 2 <sup>nd</sup> switch button by jumper selection SW2/LED3)
Mic	plug for a condenser microphone
<b>NETWORKING AND PROTOCOLS</b>	
Protocols	IPv4, SIP, TCP, UDP, HTTP, RTP, DHCP, NTP
LAN protocols	PoE (IEEE 802.3at) Network Access Control (IEEE 802.1x)
Management and operation	HTTP (Web configuration) DHCP and static IP, Remote software upgrade and monitoring.
SIP support	RFC3261 (SIP base standard), RFC3515 (SIP refer), RFC2976 (SIP info), RFC5630 SIPS Uri scheme
DTMF support	RFC2833, 2976 (SIP info)

**Input-Output location:**



**Dimensions:**



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WE HAVE MORE THAN 30 YEARS OF EXPERIENCE IN THIS TECHNOLOGY FIELD AS DEVELOPER, MANUFACTURER AND RESALER COMPANY.

IN THE INDUSTRY, WE NEGOTIATE THE MOST INNOVATIVE SOLUTIONS WITHIN BUILDING COMMUNICATION. WE HAVE DAILY FOCUS ON DEVELOPMENT AND USER-FRIENDLINESS AND OUR PRODUCTS HAVE TECHNICAL HIGH QUALITY AND PLEASANT DESIGN.

AS A DEVELOPER AND MANUFACTURER OF OUR OWN IP-INTEGRA SYSTEMS, WE ARE ON TOP OF THE MOST ADVANCED SYSTEMS FOR DOOR TELEPHONY, PUBLIC AUDIO AND ACCESS CONTROL SOLUTIONS.

OUR DEVELOPMENT DEPARTMENT HAVE DEVELOPED, TOGETHER WITH OUR PARTNERS, ELEGANT AND ROBUST DOORPHONES, SIP-CENTRALS, TERMINALS, IP-SPEAKERS, ACCESS CONTROLLERS AND APPLICATIONS WITH INTELLIGENT FEATURES AND THE MOST ADVANCED TECHNOLOGY, BUT AT THE SAME TIME EASY FOR OUR CUSTOMERS TO USE.

FREUND GROUP IS ONE OF THE TOP PROVIDERS ON THE MARKET FOR IP-BASED BUILDING CONTROL AND COMMUNICATION AND RELATED SYSTEMS.