Audio Recorder Development System GPAR12A-DEV

A convenient development platform for the GPAR12A audio recorder module targeted at engineers and designers.

The GPAR12A-DEV is intended to be used by engineers or designers as a starter development platform for systems based on GPAR9A through to GPAR12A/B audio recorder modules.

All module pins can be accessed via a 20-way header and the module's firmware programming pins are brought out to a connector allowing Design Licence Holders to add and test custom software functions.

The development system is supplied with one GPAR12A module, a low-noise desktop microphone and a USB to RS232 serial cable for control from a PC.

Note. If you need a complete audio recorder system tailored to your needs, RHDC Services Ltd would be pleased to quote for a customised version.

Features

- Studio Quality Recording
- Ultra Low Power Design
- 128GByte+ media supported
- Precision 1.5ppm Battery Backed RTC
- 44.1kHz Stereo sampling (adjustable)
- Very low jitter sample clock
- Low-Noise Stereo Mic. Preamp
- Sub-second Recording Latency
- Flexible Control Interface
- 9600 BAUD RS232 Serial Port
- Simple Serial Control Protocol
- Globally Unique ID for Inventory Control
- Compatible with 9A, 10A, 11A and 12A/B
- GPAR12B version (GPAR12B-DEV)

Applications

- Stand-Alone Audio Recorders
- Point of sale equipment
- Scientific Applications
- Multi-Channel Recording





GPAR12A Module Specifications

Unless stated otherwise: Supply Voltage = 2.5V, Sampling = 16 bit / 22.05kHz mono, source = Line, Media = Samsung 64GB EVO (TLC Flash), Temperature = 20°C, Headphones disabled. Backup battery fully charged, LEDs disabled.

Dimensions (mm)	30.8 x 33.3 x 3.5
Serial Control Port	3.3V Inv. RS-232
Record Time 22.05kHz Mono	800h (128GB)
Supply Voltage Range	1.9 to 4.5V
Power Consumption (Line)	11mW
Power Consumption (Mic)	15mW
Supply Current (Standby)	10µA
Dynamic Range (LINE input)	96dB(A)
Dynamic Range (MIC input)	96dB(A)
Maximum Input Level (Line)	+4 dBu
Maximum Input Level (Mic)	-20 dBu
Maximum Input Level (Mic+)	-26 dBu
Preamp Noise Input Referred	< 1µV RMS
Low Noise Mic. Bias Output	1.6V @ 1mA
Standby to recording latency	<1s
Time retention without power	> 6 Months

Note. Specifications are subject to change without notice.