

General Purpose Audio Recorder - Module

GPAR10A

An ultra-low-power studio-quality audio recorder module with RS232 serial control and precision time reference.

The GPAR10A is a low power audio recorder and playback module intended for OEM use. It provides true 16-bit mono or stereo recording from either a line-level or a microphone-level source with integrated microphone bias. The module can directly drive headphones or interface to other devices at line-level.

Two control interfaces are provided, switch-contact and serial. Using the switch-contact interface, the module can be used as a stand-alone recorder with the addition of a power source and a switch. Using the logic-level RS232 serial port interface, the module can be integrated with a host system such as a microcontroller.

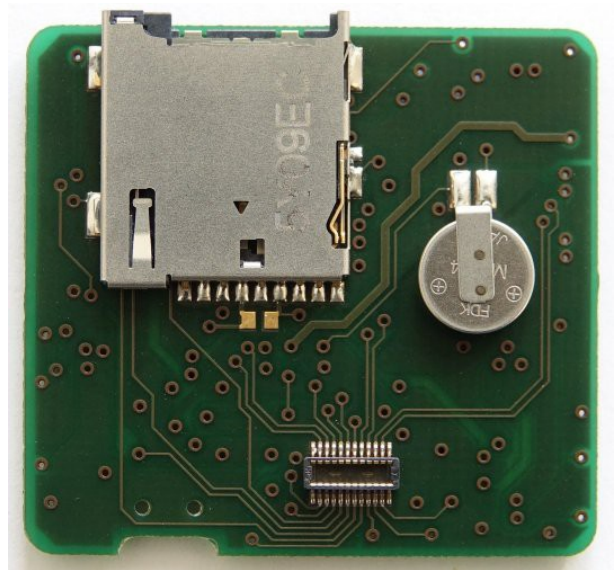
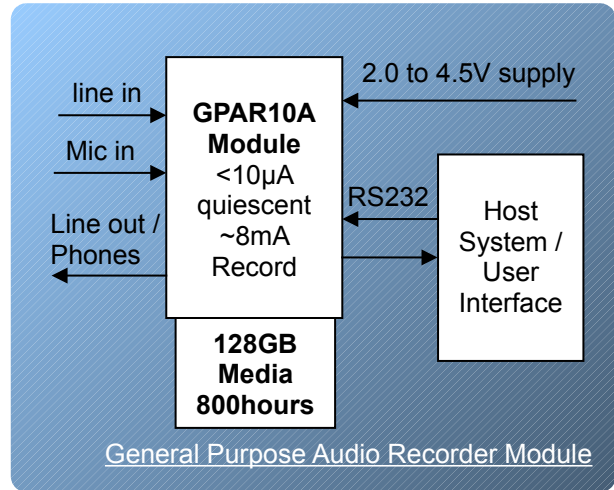
If you need a complete audio recorder or module tailored to your needs, RHDC Services Ltd would be pleased to quote for a customised version.

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
- ◆ Low-Noise Microphone Bias Out
- ◆ Sub-second Recording Latency
- ◆ Flexible Control Interface
- ◆ 9600 BAUD RS232 Serial Port
- ◆ For 2 x Alkaline or 1 x Lithium

Applications

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



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 4.0
Serial Control Port	3.3V Inv. RS-232
Record Time 22.05kHz Mono	800h (128GB)
Supply Voltage Range	2.0 to 4.5V
Supply Current (Line Record)	~8mA
Supply Current (Mic Record)	~10mA
Supply Current (Standby)	<10µA
Dynamic Range (line input)	>94 dB
Maximum Input Level (Line)	+4 dBu
Maximum Input Level (Mic)	-20 dBu
Maximum Input Level (Mic+)	-26 dBu
Preamp Noise Input Referred	<2µV
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.