Signal Essence MD 20/22
64-channel PDM Microphone Array Interface

The Signal Essence MD 20/22 Audio Interface Board is a high-performance, 64-channel USB audio interface board that is optimized for developing microphone arrays and other demanding audio applications. It offers up to 64 perfectly synchronized digital inputs, two analog audio inputs, two loudspeaker outputs and a headphone jack. It is able to support a wide variety of highly sophisticated applications.

The MD 20/22 board has a wealth of features that makes it possible to quickly create a prototype microphone array system. It includes perfectly synchronized analog/digital codecs, dedicated AEC reference feedback channels to make AEC latency perfectly predictable, and USB synchronous clocks to ensure perfect synchronization between multiple MD 20/22 interface boards.

Features

- 64-channel PDM mic input
- 2-channel 1.5 Watt loudspeaker amp
- Headphone
- USB Audio Class 2.0
- SD Card slot
- Li-Ion battery connector/charger
- Zero power during shutdown
- 2-channel analog input
- Ethernet streaming capability
- Clock synchronization to the USB clock to ensure multiple boards don't drift
- Display & Navigation
- Quick Select buttons
- 600 MHz Arm M7 CPU (i.MX RT 1062)
- 65mm x 71mm (2.6" x 2.8")