

Superior Surround Made Simple

Summit Technology is a robust wireless audio solution designed specifically for Home Theater audio applications. This product was developed to address Home Theater setup and distribution difficulties by delivering innovative features and capabilities in three key areas:

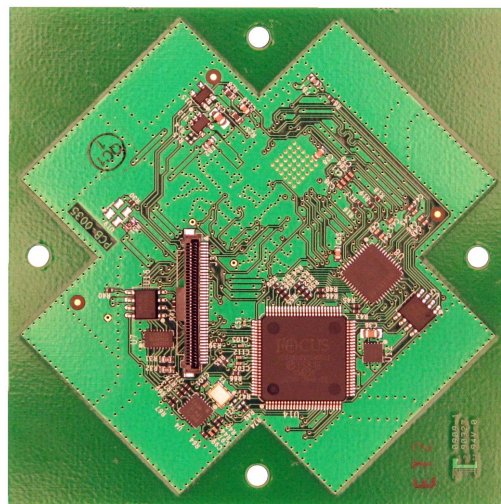
- **High Quality Audio:** 8-channel, 24-bit, uncompressed audio delivered from the source directly to the speaker drivers with very low latency.
- **Easy Setup:** Automatic Home Theater audio setup and audio sweet-spot programming reduce Home Theater setup time to less than 30 minutes, in most cases.
- **Robust Wireless Network:** Use of the uncongested U-NII band spectrum provides a noise free, interference resistant wireless network between the master and speakers with low latency.

Slave Module Description

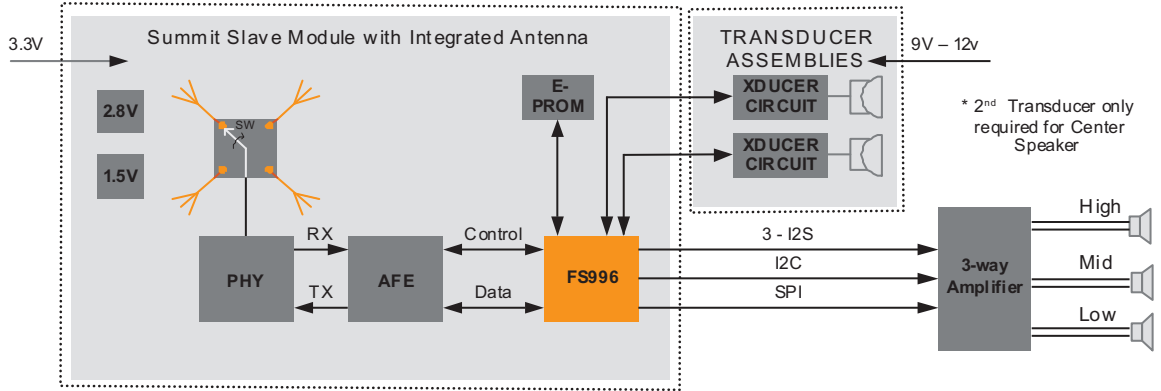
The Summit Slave Module is a production ready module designed for active speakers in a Summit Technology HD Wireless audio solution. The Summit Slave Module includes a patented, low cost, integrated high gain quad diversity PCB antenna, which provides superior wireless performance without external antennas. A 40-pin interface provides I²S digital audio outputs, power, I²C and GPIO signals for control of the amplifier and power supply.

Three separate audio filter channels, each with eight programmable bi-quad digital filters, provide driver equalization performance beyond that of analog crossovers while also eliminating the cost and complexity of passive crossover components. Each filter channel provides a programmable delay to compensate up to 23 cm (9.1 in.) of driver offset. Up to four different filter coefficient sets can be programmed, enabling the speaker to be end user settable for near-field and mid-field applications, or optimized for different music types (pop, classical, jazz, etc.)

When used with a Summit Ultrasonic Transducer Module in each speaker, SpeakerFinder™ technology determines the speaker locations and automatically assigns the audio channel based on the number of speakers, and their relative location with respect to the center speaker. If an additional transducer is used in a remote control or other portable device, the audio sweet spot can be programmed within seconds with correct audio volume and audio delay for any location in the room with MyZone™ technology.



Summit FS996 Slave Module



Summit Slave Module Block Diagram

Parameter	Performance
Audio Sampling	16- / 24-bit audio. 32 KHz, 44.1 KHz, 48 KHz, and 96 KHz data rates supported.
Power	3.3 V dc \pm 5%, 500 mA.
Indoor Range	SpeakerFinder™ and MyZone™ applications designed to support up to a 9 m x 9 m (30 ft x 30 ft) room. <i>Wireless performance greatly exceeds this distance.</i>
Latency (fixed)	5 milliseconds.
Frequency Band	U-NII 5.1GHz to 5.7GHz. 21 non-overlapping channels. DFS channel support.
Module Size	82 mm x 82 mm (3.23 in. x 3.23 in.)
Antenna	Integrated high gain, quad diversity PCB antenna.
Certifications	FCC part 15, FCC ID. FCC ID UA9300. Industry Canada 9129A-300.

Ordering Information

444-2196	FS996 Summit Slave Module with Integrated Antenna ¹ .
----------	--

1. Contact your Summit Semiconductor sales representative for pricing and availability.