

Superior Surround Made Simple

Summit Technology is a 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

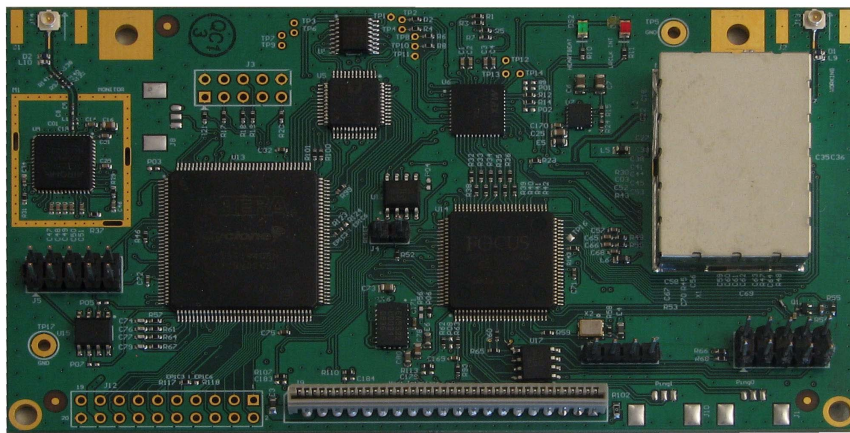
Master Module Description

The Summit Master Module is a production-ready board solution designed to update existing consumer electronics designs with Summit Technology. The Summit Master Module is designed to enable a quick time-to-market upgrade of existing DTV, AVR, Blu-ray, HTiB designs to support wireless audio. The compact 60.1 mm x 111 mm (2.4 in. x 4.37 in.) module easily mounts inside a CE device chassis and supports two antennas via U.FI connectors. A 40-pin interface provides power and all interface signals (I²S digital audio inputs, power, I²C and GPIO) necessary for controlling the Summit Master Module.

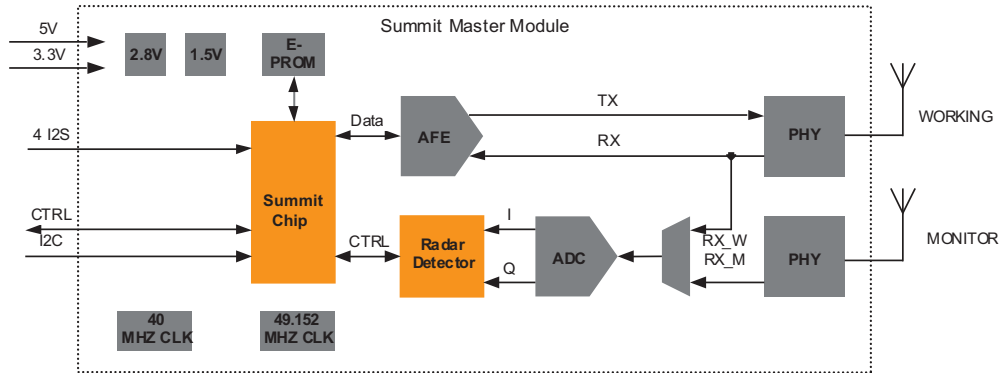
The Summit Master Module provides four I²S inputs to support 1.0 to 7.1 audio channel configurations. It accepts up to eight channels of 24-bit uncompressed digital audio at sample rates up to 96 KHz. The Summit Master Module is controlled through a simple API via I²C.

On-board radar detection and avoidance circuitry supports the use of the uncongested U-NII Mid and U-NII Worldwide spectrums. The U-NII spectrum has 21 non-overlapping channels and provides vastly superior performance and interference immunity compared to solutions using the 2.4 GHz/ 5.8 GHz ISM spectrums.

SpeakerFinder™ technology discovers speakers, accurately identifies their location within a couple of inches (5 cm.), assigns audio channels based on speaker location and calibrates the audio sweet-spot upon power up - eliminating the time consuming setup process faced by today's consumers.



Summit Technology Master Module



Summit Master 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 (Energy Star mode supported)	5 V dc \pm 5%, 370 mA. 3.3 V dc \pm 5%, 440 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>
End to End Latency	2.2/5.2 milliseconds (fixed) end-to-end latency.
Frequency Response	+/- 0.008 dB, 20 Hz - 20 KHz (24-bit mode).
Dynamic Range	145 dB (24-bit mode).
THD +N%	0.000001% at full scale (24-bit mode).
Speaker-to-Speaker Clock Skew	< 200 ns.
Frequency Band	U-NII 5.1GHz to 5.7GHz. 21 non-overlapping channels. DFS channel support.
Module Size	60.1 mm x 111 mm (2.4 in. x 4.37 in.)
Antenna	Supports whip style antennas with reverse U.FI connectors.
Certifications	FCC part 15, DFS Radar for USA, FCC ID.

Ordering Information

444-2195	Summit Master Module with U.FI connectors. <i>Contact your Sales Representative for pricing and availability.</i>
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