VENICE 6.5 MODULE - 110 X 51 MM

APPLICATIONS

- **Internet Radios**
- **AV receivers**
- **Wireless speakers**
- **Speaker docks**
- **Hybrid DAB/DAB+/FM Radios**

OVERVIEW

The Venice 6.5 FS2026-5 module is a complete hardware and software solution for Internet radio, DLNA, network streaming, UPnP, DAB/DAB+ and FM-RDS products. It provides the simplest and lowest-cost solution for high-quality audio streaming from live Internet radio stations or network-based music collections.

Venice 6.5 has been designed as part of a complete system including IR 2.6 software and the Jupiter 6.5 reference platform. The Venice 6.5 module can also operate in slave mode allowing full control to an external processor over Frontier's FSAPI communications interface.
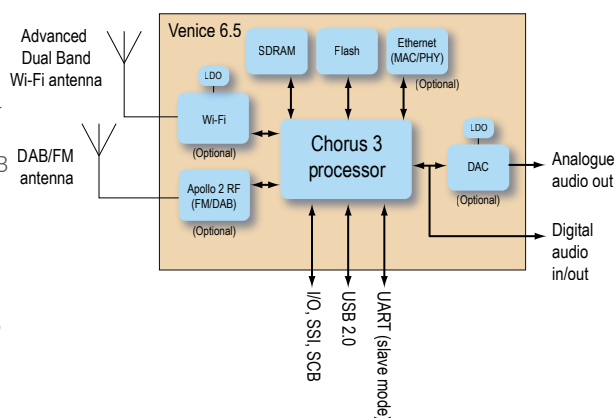
Based around Frontier Silicon's powerful Chorus 3 processor, Venice 6.5 streams radio and music files in a variety of formats including AAC, AAC+, MP3, WAV, WMA and FLAC, enabling stand-alone network-based audio products.

Frontier Silicon provides modules pre-installed with software which can be configured to customer requirements.

Frontier Silicon provides the Jupiter 6.5 evaluation and reference platform, which can be used to enable rapid development of Venice 6.5-based systems.
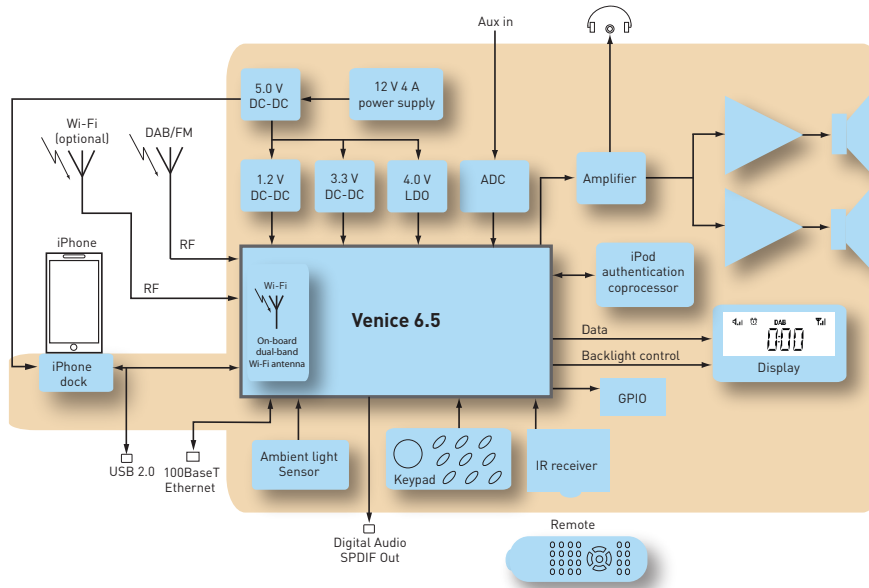
CONNECTIVITY

- 802.11a/b/g/n – WEP, WPA, WPA2 security
- USB 2.0 High Speed device/host
- iPod/iPhone/iPad dock via USB
- 10/100 Mbit/s Ethernet
- On-module audio DAC
- Digital audio output - I^2S or S/PDIF
- SPI LCD interface
- Infrared remote control
- Keyboard presets, rotary encoder
- SCB I/F (I^2C compatible)

FEATURES

- Onboard dual band Wi-Fi antenna supporting 2.4 GHz and 5 GHz bands
- DAB (MPEG1) and DAB+ (AAC) decoding
- Wi-Fi Protected Setup (WPS) for easy pairing with a home router
- Automatically software upgradable in the field through Internet or USB
- Audio post-processor on-module EQ
- FCC and ETSI Wi-Fi compliant - on-board PIFA antenna variant with FCC ID.
- RoHS compliant
- Temperature range: operation 0 to +70°C storage -40 to +85°C

MODES

- Home network music streaming
- iPod/iPhone/iPad control including audio playback via dock connector or USB
- DAB/DAB+ Digital radio
- FM radio reception with RDS
- Auxiliary input
- Audio playback from USB memory stick
- Live and on-demand internet radio broadcasts
- DMR (Digital Media Renderer)

Venice 6.5 block diagram showing: Advanced Dual Band Wi-Fi antenna, DAB/FM antenna, SDRAM, Flash, Ethernet (MAC/PHY) (Optional), LDO, Wi-Fi (Optional), Apollo 2 RF (FM/DAB) (Optional), Chorus 3 processor, LDO, DAC (Optional), Analogue audio out, Digital audio in/out, I/O SSI SCB, USB 2.0, UART (slave mode)

VENICE 6.5 MODULE: INTERNAL BLOCK DIAGRAM

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Venice 6.5 FS2026-5 Product Brief FSM-0010-7719 Rev 1
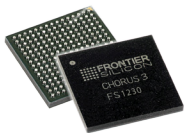
VENICE 6.5 FS2026-5
Internet radio/Network streaming/DAB/FM/iPhone audio module

TYPICAL VENICE 6.5 APPLICATION

CHORUS 3 BASEBAND PROCESSOR

The **Chorus 3** FS1230 baseband processor is the latest generation of integrated system-on-chip, providing an optimised solution for wireless connectivity, Internet radio, WorldDMB Profile 1, DAB, DAB+, DMB-Radio and FM-RDS broadcast receiver products. It incorporates a number of mixed-signal system components as well as an applications processor and advanced peripherals, providing significant space, cost and power savings.

CHORUS 3 ADVANCED BASEBAND CHIP

STANDARDS AND CERTIFICATION

Venice 6.5, Jupiter 6.5 and IR 2.5 have been designed to operate seamlessly with the rest of the network audio world. The Jupiter 6.5 platform is tested to comply with EN55020, EN55013, CE (ETSI) and FCC (part-15) to assist suitable end-products based on this platform to obtain certification for industry standards; such as CE approval, iPod and iPhone certification, FCC, Wi-Fi Alliance and DLNA certification. For more information, contact Frontier Silicon.

See also:

Jupiter 6.5 Product Brief   FSM0010-7983

BUILD OPTIONS

PRODUCT CODE		WI-FI	DAB	FM	ETHERNET
FS2026-5	W	•			
	E				•
	WB	•	•	•	
	WF	•		•	
	WE	•			•
	WEB	•	•	•	•
	WEF	•		•	•

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