## Product Information

#### **Sharp DVB-S2 Tuner**

Status as of: May 2007

Model NIM: BS2F7HZ0164 | BS2F7HZ0165









## DVB-S2 tuner with integrated demodulators

## for high-end HDTV via satellite

The two DVB-S2 tuner modules (BS2F7HZ0164 and BS2F7HZ0165) are fully equipped Network-Integrated-Modules (NIM), integrating a complete HDTV RF front-end and a demodulator circuitry. With this innovative two-in-one solution Sharp has been one of the first electronics companies offering tuner modules that combine a front-end for both, 8PSK and QPSK detection to receive HDTV and SDTV broadcast signals. The Integrated demodulator IC provides an 8-bit digital data-stream for further processing.

There are two choices of demodulators from two cooperation partners: the Conexant CX24116 and the ST Microelectronics STB0899. These two options allow the system integrator and development engineer to be in position to develop a state of the art satellite receiver system for two different backend solutions. Therefore an enormous flexibility for the user is given with these two tuners: BS2F7HZ0164 (STM demodulator) and BS2F7HZ0165 (Conexant demodulator). In BS2F7HZ0164 NIM the RF semiconductor for the DVB-S2 standard is a proprietary development by Sharp, featuring technical parameters that are well above the values required by the standard, include the high input sensitivity, excellent selectivity, high dynamic performance and low phase noise. It has already proven successful in the DVB-S2 front-end tuner (BS2S7HZ6306) for digital satellite receivers. Sharp was also one of the first manufacturers to provide a digital receiving unit for the new DVB-S2 standard: a key component for receiving HDTV satellite broadcast.

All Sharp DVB-S2 tuners cover a typical frequency range of 950 to 2150 MHz for satellite TV transmission and is suitable for receiving both HDTV (DVB-S2) and SDTV (DVB-S) signals.

Like all Sharp's terrestrial and cable tuners, the new DVB-S2 tuners are compliant with the RoHS guidelines.

#### Availability

The DVB-S2 RF only tuners and DVB-S2 NIM tuners are already available from Sharp dealers and distribution partners.

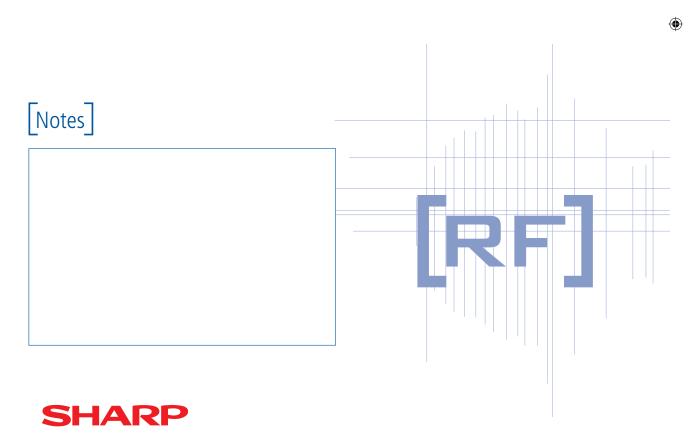


Microelectronics



# [Characteristics **DVB-S2 Tuner**]

Type:	BS2F7HZ0164	BS2F7HZ0165	BS2S7HZ6306
Dimensions (I x w x h)	58 x 39 x 13.2 mm	58 x 39 x 13.2 mm	32,6 x 29 x 13 mm
Mounting	Horizontal: #HZ0164 Vertical: #VZ0164	Horizontal: #HZ0165 Vertical: #VZ0165	horizontal
Demodulator	STB0899 ST Microelectronics	CX24116 Conexant	No (RF-Only)
Input frequency	950 to 2150 MHz	950 to 2150MHz	950 to 2150 MHz
Phase noise (at 10kHz Offset, typ)	-80dBc/Hz	n.n.	-80dBc/Hz
Noise Figure (typ)	8dB	10dB	8dB
Power consumption (typ)	2.77W (typ.)	3.8W (max.)	0.396W (typ.)



**Head Office** Sharp Microelectronics – a division of Sharp Electronics (Europe) GmbH Sonninstraße 3 | 20097 Hamburg | Germany | Tel.: +49-18 05-07 35 07 | Fax: +49-40-23 76 22 32 | www.sharpsme.com