

OVERVIEW

The STN6576 is a unique dual (2T+2S) universal 205mW/channel CMOS tuner IC that serves all TV standards including ISDB-T/DVB-T/T2, DVB-S/S2, and DVB-C/C2. It covers the whole band from 44MHz to 1GHz for terrestrial/cable reception, and 950MHz to 2150MHz for satellite reception. The integrated two ISDB-T/DVB-T/T2/C/C2 and two ISDB-S/DVB-S/S2 tuners can work simultaneously, making the STN6576 an ideal cost-saving high performance solution for applications receiving two free-to-air channels AND two premium channels from satellite.

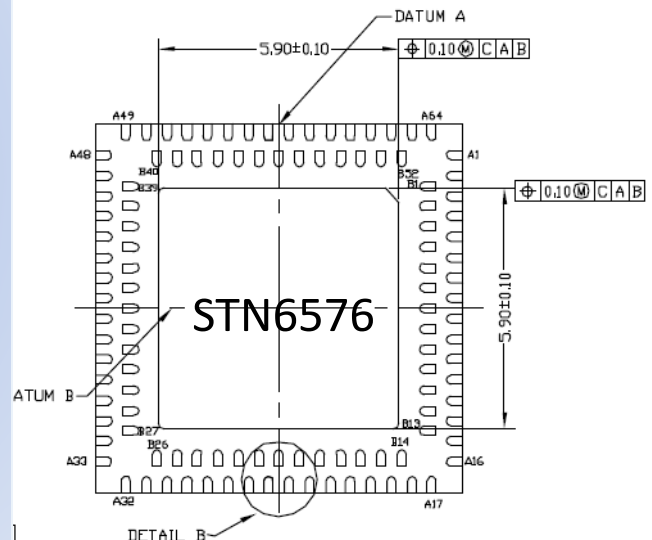
KEY FEATURES

- Two terrestrial plus two satellite channels
- Multi standard support
 - DVB-T/T2, ISDB-T, DVB-C/C2, and J83.A,B,C
 - ISDB-S, DVB-S/S2, ABS-S
 - ATSC, DTMB (GB202006)
 - PAL/NTSC/SECAM
- Unique solution to target multi channel ISDB-T/ISDB-S or DVB-T/T2/S/S2 systems
- Only Tuner IC in the market that covers both Satellite & Terrestrial/Cable, simultaneously
- UHF/VHF tuning range from 44-MHz to 1-GHz
- S-band tuning range from 950-MHz to 2.15-GHz
- No external LNA required, only one crystal
- Symbol rate 1-Msps to 60-Msps (DVBS/S2)
- 116 pin 9 mm x 9 mm QFN
- Ultra-low power consumption of 205-mW/Ch
- Eliminates costly and low performance loop through connections

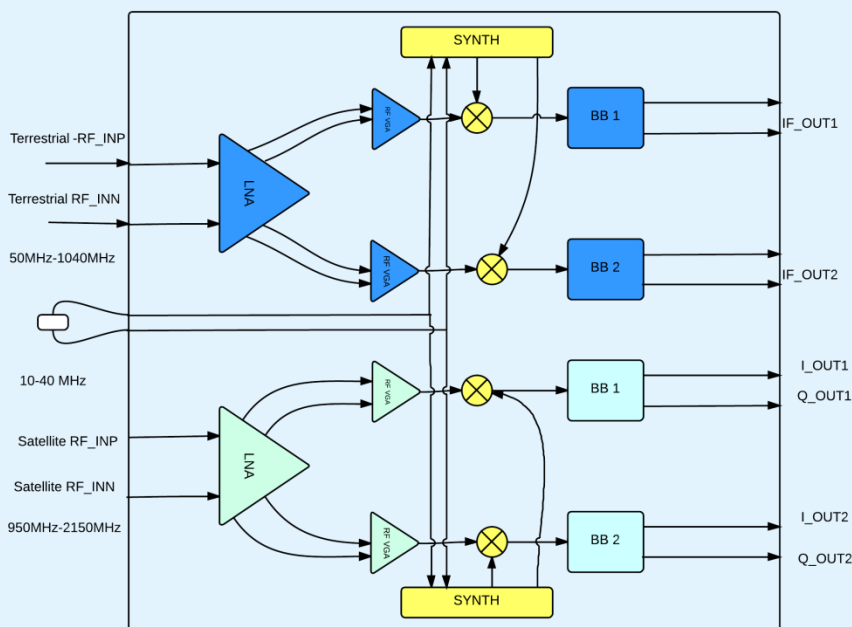
APPLICATIONS

- iDTV
- Digital Terrestrial Set Top Box
- Hybrid Set Top Box

PACKAGE



BLOCK DIAGRAM



SPECIFICATION

STN6576 Technical Specification:

	Ch1-2 (T/C)	Ch3-4(S)
Input Frequency Range	44MHz-1GHz	950-2150 MHz
Input Impedance	75Ω	75Ω
Noise Figure (Typ)	3.8	4.5
Input Power Range	-100 dBm to +6 dBm	-95 dBm to -10 dBm
Phase Noise	-91 dBc/Hz @ 10 KHz	-91 dBc/Hz @ 10 KHz (DVB-S) -100 dBc/Hz@10KHz (DVB-S2)
Maximum Total gain	110 dB	110 dB
Total Power Consumption		810mW
Power Consumption per Ch		205 mW
Output Voltage	1 Vppd	1Vppd
Output Load	1KΩ, 20 PF	1KΩ, 10 PF
Output frequency range	3-14 MHz	Zero IF (I&Q)
CTB	63 dB	

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Ordering Information:
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