MT9100

Demodulator IC for ATSC 3.0.

A high-performance receiver in an optimized single package, and fully complies with the ATSC standard, and good in performance and low power consumption. Backward compatible with ATSC 1.0.

MT9100 Key product features
(1)   Support ATSC 1.0 A/53, A/74, ITU-T J.83 Annex B, and SCTE DVS-031 standards
(2)   Fully comply with ATSC3.0 A/321 and A/322 standard.
(3)   Auto detection and switch for major and minor versions
(4)   Have a smaller package size 6 by 6 mm.
(5)   Design wise, dedicated to ATSC market, benefit on more cost-effective.

Main ATSC3.0 features are supported
- Modulation: QPSK, 16QAM-NUC, 64QAM-NUC, 256QAM-NUC, 1024QAM-NUC, and 4096QAM-NUC
- Bandwidth: 6 MHz, 7 MHz, and 8 MHz
- FFT mode: 8K, 16K, and 32K
- Scattered pilot patterns(SP3_2 to SP32_4)
- Multiplexing Mode: LDM , TDM, FDM, TFDM, LDM, LTDM, and LFDM
- Transmit diversity (MISO)
- Single/Multiple (maximum of 4) PLP**s**

The MT9100 can accept tuners that provide LIF output. A high rejection channel filter has been Included to ease the channel filtering requirement of the tuner whilst still meeting the stringent requirements for adjacent channel interference.

The MT9100 is capable of blind acquisition of ATSC 3.0, ATSC 1.0 and J.83B signals, enabling fast and accurate auto scanning. The built-in frequency recovery circuit is capable of compensating for all typical tuner and broadcast frequency errors.

System Demod Blockdigram.
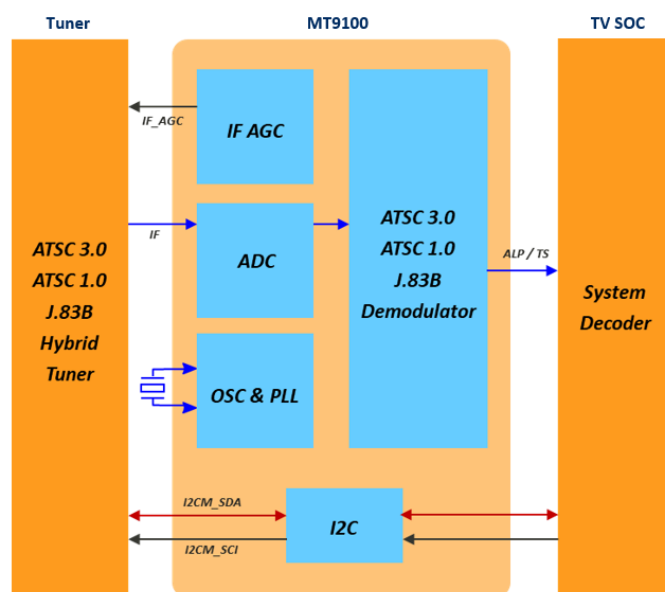
Specifications

MT9100
Market:
North America, South Korea

Package:
QFN 6*6

Pin Count:
48pin

Demod:
ATSC3.0/ATSC1.0/J.83B

Format out:
ALP or TS

Operation Temperature:
0C~70C