

NDS2406 DVB-T2 Modulator



Outline

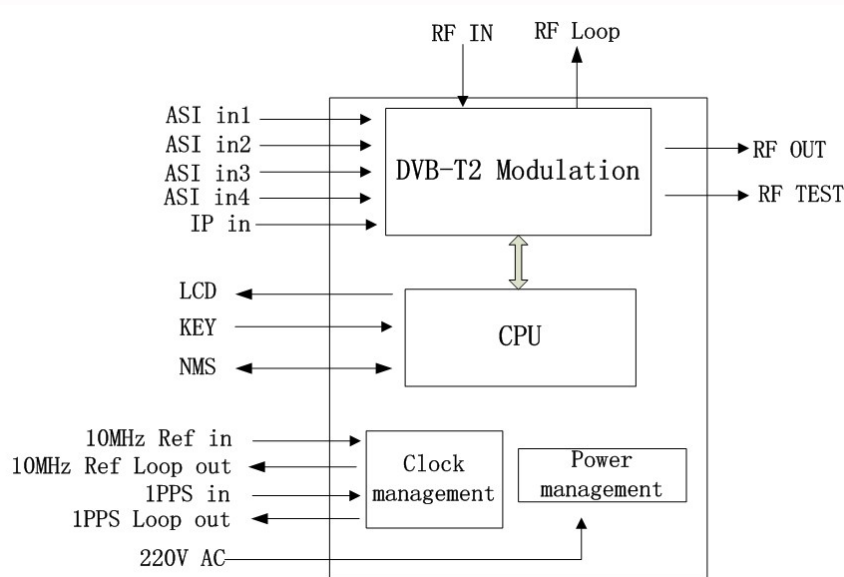
NDS2406 (NDS2406A) DVB-T2 modulator is our new product developed complying with the DVB-T2 standard. With its advanced modulating technology, this modulator can effectively make use of the ground spectrum resources and make it possible to provide reliable signals for fixed, mobile and portable devices. Compared with DVB-T, the channel capacity is increased by 30% under the similar carrier to noise ratio (CNR) threshold. NDS2406 (NDS2406A) DVB-T2 modulator also supports single-PLP and multi-PLP (option) to receive T2-MI from DVB-T2 gateway through its ASI and IP port. (This function is also option.)

Moreover, this device can be upgraded and controlled through network system, which allows it to be widely used in setting up digital broadcasting network and provide good signals for scientific laboratory and DVB-T2 STB.

Features

- Fully complying with EN302 755 standard
- 4 ASI input ports (for 1 channel TS input with 3 ports for backup)
- TS over IP input (UDP); T2-MI over IP input (Option)
- 10MHz input/loop out, 1PPS input/loop out
- DVB-T2 RF output
- Supports single PLP, multi-PLP (Option)
- Support MISO and SISO
- Support QPSK/16QAM/64QAM/256QAM (normal or rotated)
- Support TS format: T2-MI (Option) or TS (Mode A)
- High performance output: MER>43dB, shoulder level>56dB
- Output signal bandwidth: 5M, 6M, 7M, 8MHz
- Support MFN and SFN (Option) net mode
- Supports non-linear and linear digital pre-distortion (DPD) --->Video
- RF output level: -25~+3 dBm, 0.1db stepping
- Constant temperature crystal oscillator, as high as 0.1ppm stability
- Support online upgrade
- Keyboard operation and LCD display
- Web Network management system (GUI)

Principle chart



Specifications

| | | |
|-------------------|---|---|
| Input | T2MI input over ASI and IP (Option) | 1000 Mbps Ethernet port ---NDS2406A |
| | | 100 Mbps Ethernet port ---NDS2406 |
| | 1 channel TS input over ASI, TS over IP port (UDP) | |
| | 10MHz reference clock input and loop out, BNC interface | |
| | 1PPS input and loop out, BNC interface | |
| Modulation | Standard | EN302 755 |
| | Mode | Mode A: single-PLP; Mode B: multiple-PLP (Option) |
| | PLP Constellation | QPSK, 16QAM, 64QAM, 256QAM (Normal or Rotated) |
| | L1 Post Constellations | BPSK, QPSK, 16QAM, 64QAM |
| | FEC Length | Short(16K), Normal (64K) |
| | FEC Rate | 1/2, 3/5, 2/3, 3/4, 4/5, 5/6 |
| | Pilot Pattern | PP1 - PP8 |
| | Guard Interval | 1/128, 1/32, 1/16, 19/256, 1/8, 19/128, 1/4 |
| | FFT Mode | 1k, 2k, 4k 8k, 16k, 32k (normal or extended) |
| | Bandwidth | 5MHz, 6MHz, 7MHz, 8MHz |
| | Net Mode | MFN, SFN (Option) |
| | RF Out | Connector |
| RF range | | 30~999Mhz, 1hz stepping |
| Output level ATT | | -25~+3 dBm, 0.1db stepping |
| MER | | > 43db |
| Shoulder Level | | >56dB |
| System | LCD display, keyboard and web Network management | |
| | Supporting software upgrading through network | |