

### Product Brief



### General description

- Full compliance with GB20600-2006
- Full compliance with requirements of the GB/T 26683-2011 and GB/T 26686-2011
- Supporting high IF, low IF and I/Q input, compatible with CAN tuners and silicon tuners
- TS output in parallel or serial format
- Pin compatible with AltoBeam LQFP128 chips (ATBM8810/8820M/8820S/8830/8830H/8840)

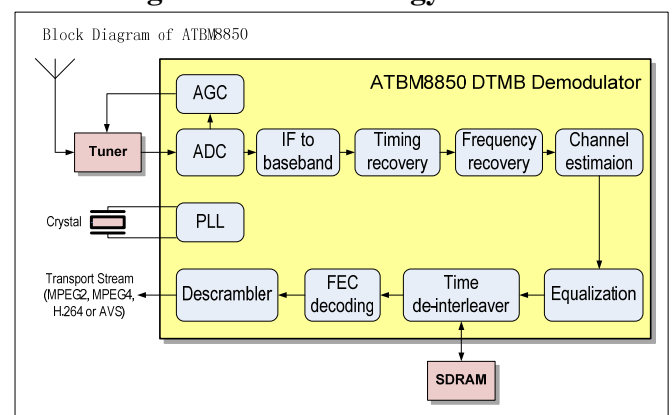
### Advantages

- Channel impairments management:
  - Built-in reception quality indicators
  - Impulsive noise rejection capable
  - Outstanding adjacent and co-channel rejection capability with integrated and flexible digital channel filtering
  - High-performance digital carrier, timing and symbol recovery loops
- Performance advantages
  - Outstanding performance for both single and multi carrier modes
  - Rapid PLL lock and channel changing
  - Outstanding multipath and pre-echo performance in SFN environment
  - High speed mobile receiving

### Full DTMB demodulation

- 330 modes in GB20600-2006
- QPSK/4QAM-NR/16QAM/32QAM/64QAM
- FEC rates of 0.4, 0.6 and 0.8
- Guard internals of PN420, PN595 and PN945
- Time de-interleaver depth M=240 and M=720

### Block Diagram and Technology



- 55nm CMOS process
- On chip PLL, supporting external crystal at the frequency range of 28~32MHz
- I<sup>2</sup>C bus repeating supported
- Voltage supply: 1.2V (core), 2.5V/3.3V (I/O)
- Package: LQFP128 20 × 14 × 1.4mm<sup>3</sup>
- Power consumption
 

normal working:	230mW
Standby mode:	66mW
Suspend mode:	33mW

### Applications

- iDTV, set-top-box, car receiver
- Portable digital TV receiver
- DTV testing or experiment equipment

