



## ADVANCED DIGITAL CABLE TUNER

### FEATURES

- Supports 64 and 256 QAM
- Input frequency range of 50 MHz through 860 MHz \*
- IF output range of 36 MHz through 44 MHz
- High linearity across entire frequency range
- Differential signals for high noise immunity
- Eliminates need for image reject mixer
- Highly integrated and cost-effective
  - Minimal BOM with reference designs available
  - IF AGC and frequency synthesizers included
  - Standard logic CMOS with single 3.3V supply
  - 48-pin TQFP

\* = For use only in applications where the input frequency to the diplexer is less than 1000 MHz.

### SUMMARY OF BENEFITS

- Narrowband first IF eliminates processing of unnecessary channels
- DOCSIS and EuroDOCSIS 1.0/1.1/2.0 compliant
- Minimal in-house RF expertise required
- Superior alternative to can tuners
  - High quality and reliability (no hand tweaking)
  - Enables lower profile and smaller designs
  - Simplified manufacturing flow
  - Lower BOM cost
- Applications
  - Cable modems
  - Cable set-top boxes

### Tuner Application Example (Cable Modem)

