

# INT6400/INT1400 **NO NEW WIRES.**

## HomePlug AV Chip Set



HomePlug® AV  
200Mbps PHY

### Features

#### INT6400/INT1400 Chip Set:

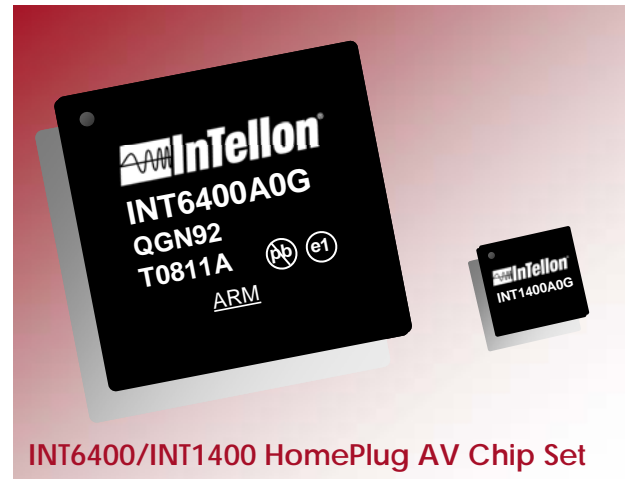
- HomePlug® AV MAC & PHY plus ADC and DAC in a 196-contact LBGA, Pb-free package
- MII (Host & PHY) interface
- Supports 1024/256/64/16/8-QAM, QPSK, BPSK and ROBO Modulation Schemes
- 128-bit AES Link Encryption with key management for secure powerline communications
- Windowed OFDM with noise mitigation based on patented line synchronization techniques improves data integrity in noisy conditions
- Dynamic channel adaptation and channel estimation maximizes throughput in harsh channel conditions
- Advanced Turbo Code Forward Error Correction (*France Telecom – TDF – Groupe des écoles des télécommunications Turbo codes patents license*)

#### INT6400 MAC/PHY IC:

- ToS, CoS and IP Port Number Packet Classifiers
- Supports IGMP managed multicast sessions
- Green Standard (ROHS) Compliant
- Programmable-gain Rx/Tx

#### INT1400 AFE IC:

- Tx Filter, programmable-gain line driver, programmable-gain Rx amplifier
- Differential coupling
- 5 X 5 mm 32-pad QFN package
- Companion to INT6400



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### Benefits

- **Third-generation HomePlug AV-based powerline two-chip chipset**
- **High-performance cost-down solution**

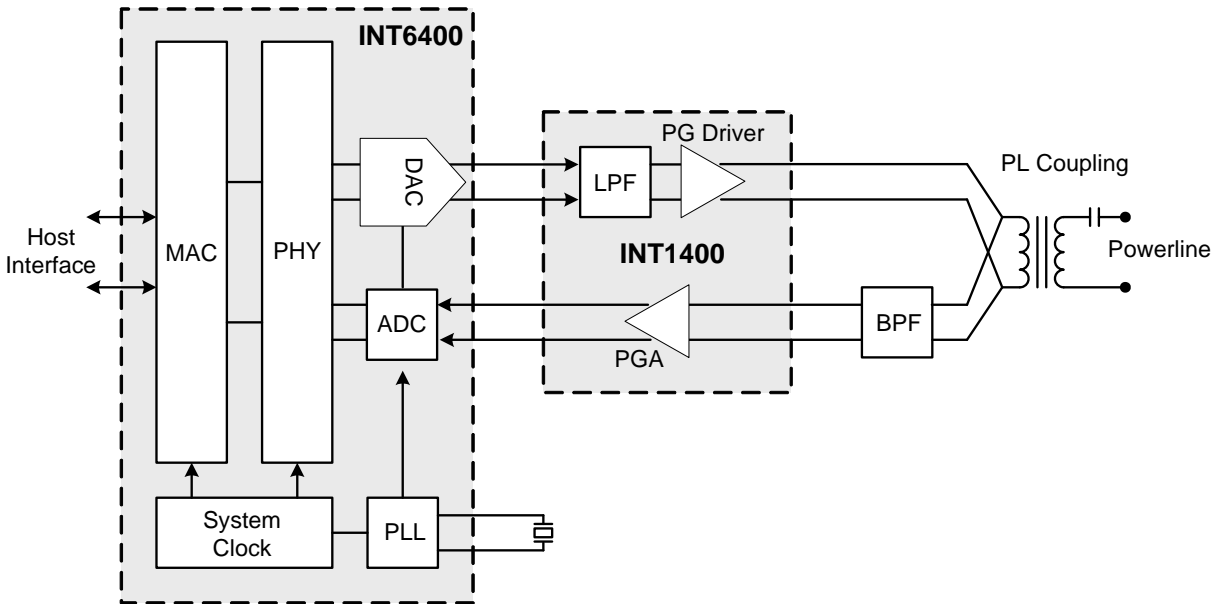
The Intellon INT6400/INT1400 HomePlug AV chip set solution is comprised of the INT6400 Medium Access Controller (MAC)/Physical layer (PHY) IC and the INT1400 AFE/Line Driver IC (two-chip set).

The Intellon HomePlug AV transceiver is optimized for multi-media streaming applications and is fully compliant with the HomePlug AV standard to reliably deliver up to 200 Mbps PHY-rate over power line wiring.

The INT6400 includes a complete HomePlug-AV MAC and PHY, an Ethernet MII (Media Independent Interface), an external SDRAM (Synchronous Dynamic Random Access Memory) interface. In addition, the INT6400 includes the A/D (Analog-to-Digital) and D/A (Digital-to-Analog) converters required for analog interface to the INT1400 AFE/Line Driver IC.

The INT1400 AFE/Line Drive IC includes a Tx filter, a programmable-gain line driver and a programmable-gain Rx amplifier. The programmability of these amplifiers opens up new and important signal optimization functionality.

## Functional Diagram



## Ordering Information

INT6400TR, INT1400TR Intellon HomePlug AV Chip Set



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