

Adaptive Networks' High-Speed Powerline (HSP™) communications chip set has been developed to enable effortless deployment of an Ethernet-class network over a home's powerlines.

Using innovative adaptive wideband signal processing technology and networking protocols, the chip set can reliably transform any electrical outlet in the home into a network interface.

The HSP™ Chip Set combines powerline-optimized wideband spread spectrum modulation, adaptive synchronization and equalization, error-control coding and powerline-optimized token passing protocols. These chip-set features result in a network that offers reliable connectivity over a home's powerlines with the QoS support that is required for today's multimedia applications.



### Benefits of Adaptive's Powerline Solution:

- Ethernet-class speed over existing home powerlines.
- Reliable low-latency communication anywhere in a home.
- QoS support for multimedia applications.
- Field-proven technology.
- Low cost with consumer price points

### Features:

- Powerline-optimized wideband modulation.
- Adaptive synchronization and equalization.
- Forward Error Correction (FEC) optimized for powerline.
- QoS support inherent in SAR and MAC.
- Support for short frames.
- Powerline-optimized token passing.
- Multi-Mbit application usable throughput.

### Specifications:

#### HSP™ Chip Set:

- Powerline Signal Processor (PSP)
- Analog Front End (AFE)

#### Speed:

- Raw 20Mbps
- Payload 3.5Mbps

#### Modulation:

- Wideband

#### Interface:

- USB Version 1.1

#### Software Compatibility:

- NDIS 4
- NDIS 5
- Windows 98
- Windows 2000

#### BER:

- $<1 \times 10^{-9}$

#### Power Requirements:

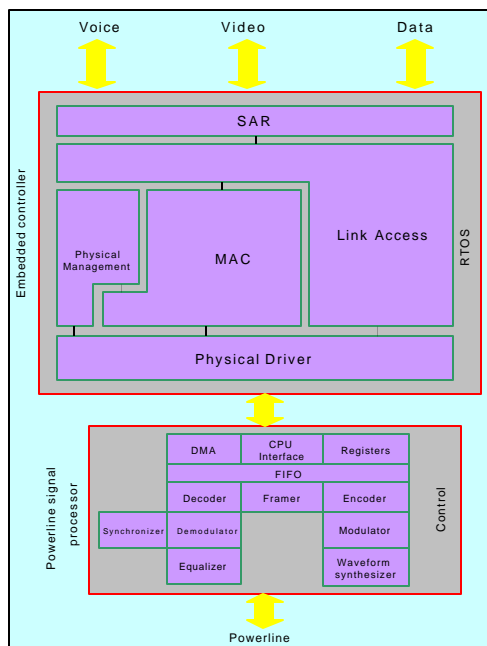
- +5V

#### Operating Temperature

- 0-70°C

#### FCC Compliance:

- Part 15



*This is a preliminary specification document. Details are subject to change without notice.*