# Psst...want some speed?\*\*



#### **Applications**

- NIC card hybrid solutions (V.90 and G.Lite)
- PC OEMs, remote modem manufacturers

#### **Components**

- MC143418 DSL AFE
- MC143410 24-Bit DSP with PCI Interface
- All software required for V.90/ G.Lite functionality

#### **Benefits**

- · Low-cost, integrated design
- High-performance consumer communications solution for PC
- Designed for upgradability to future standards

#### **Key Features**

- V.90 and G.Lite compliant
- Compatible with the ADSL DMT: T1.413i2 Category I and II
- PC99 compliant, supports Windows ® 98, Windows 2000
- RFC2364: PPP over AAL5
- RFC1483: Ethernet over AAL5
- ACPI D3Cold support
- PCI 2.2 compliant
- · Upgradable to future standards
- Backed by Motorola's V.34 and DSL IP portfolio

#### **Product Overview**

Motorola's CopperGold Lite chip set, XS143462SK1, is designed to allow modem manufacturers to build the next generation of consumer modems. The CopperGold Lite supports the operation of traditional V.90 analog data, fax, and voice (D/F/V) services, or digital subscriber line (G.Lite) services in a cost-effective modem platform. Created for PC network interface card (NIC) applications, the chip set is bundled with the software required to build a PC NIC. A comprehensive design kit (XS143462RDK) which includes a reference modem, the bill of materials, certification reports, gerber files, and documentation is also available.

The CopperGold Lite integrates Motorola's proven V.90 modem technology with its high-performance, standards-compliant MC143410 24-bit Digital Signal Processor (DSP). This Discrete Multi-Tone based DSP is designed for compliance with the G.992.2 standard. The DSP is designed to squeeze the highest performance over the longest loops, which translates into more customers, higher connection rates, and fewer customer service calls.

Designed with the flexibility of an embedded 24-bit DSP, this upgradable chip set is designed to support the new ITU series of ADSL standards: G.992.2 (G.Lite) and G.994.1 (G.hs). The DSP's ability to support multiple ITU standards enables a manufacturer to ship a "universal" modem that is designed to connect with the wide variety of ADSL configurations being deployed in different regions in the world — splitterless or splittered, 256 or 128 subcarriers for frequency division multiplexing, and DSL over POTS.

www.motorola.com/coppergold



## **CopperGold**<sup>™</sup>**Lite**

### **Block Diagrams**

The following diagram illustrates the CopperGold™ Lite Chip Set:



