DP83848M/T/H PHYTER® Small Form Factor 10/100 Single Port Physical Layer Products

Small Package, Big Performance for Commercial, Industrial, and Extreme Applications

The PHYTER® commercial DP83848M transceiver addresses the quality, reliability, and cost requirements of embedded developers networking their devices for the home or high end peripherals.

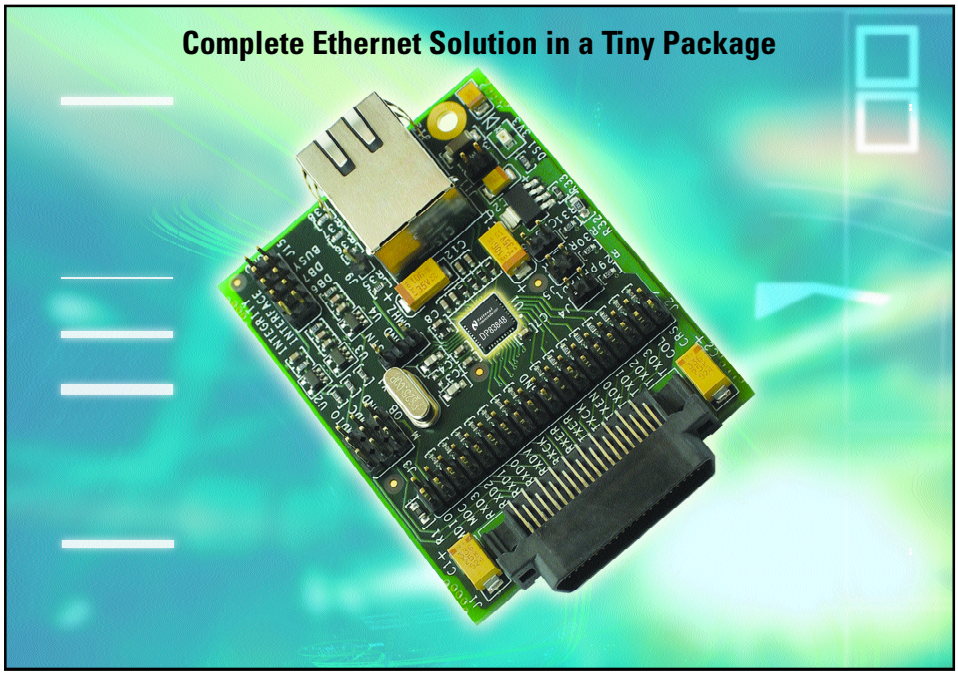
The PHYTER industrial DP83848T (-40°C to 85°C), and extreme DP83848H (-40°C to 125°C), transceivers address the quality and system reliability needs of developers implementing Ethernet in harsh environments. Both devices have IEEE 802.3 specification compliance guaranteed by test on every unit shipped.

These three new single port 10/100 physical layer Ethernet transceivers address the high quality, high reliability, and small form factor required for rugged operation in space-sensitive and thermally-demanding environments.

These devices are ideally suited for motor control, building automation, automotive, peripheral, and test equipment applications.

Target Applications

- Industrial controls
- High-end peripherals
- Building automation
- Motor control
- Transportation



Family Features	Benefits
Auto-MDIX	Automatically detects and corrects for straight or cross-over cables
Low power <270 mW	Saves on battery life and eases thermal management
Error free operation up to 137m	Dependable network performance over long distance
25 MHz Clock output	Reduces system clocking complexity and cost
Flexible power management	Extends system life and reduces overall system power consumption
25 MHz MDIO	Minimizes system configuration time
MII	Industry standard PHY interface
LLP-40	Saves board space for designs requiring a small form factor
Superior 4.0 kV ESD protection (HBM)	Robust operation in harsh environments

Visit ethernet.national.com

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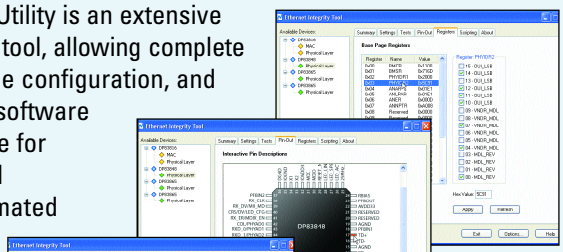
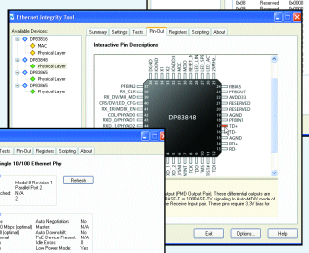
The Sight & Sound of Information

PHYTER® Ethernet Integrity Software Utility

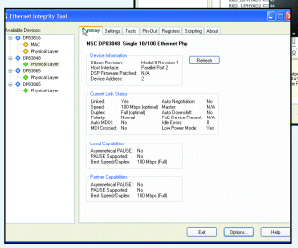
The Ethernet Integrity Software Utility is an extensive Ethernet support and diagnostics tool, allowing complete PHY access for link status, device configuration, and network status monitoring. This software utility provides a unique interface for system development, debug, and diagnostic work as well as automated script generation for system manufacturing and testing. This software is available as a FREE download on the web at **ethernet.national.com**.



Device Registers



Device Pin-Out



Device Settings

Selected Processors and FPGAs Available with Integrated 10/100 MAC

Freescale® ColdFire® Processors
MCF5207
MCF5208
MCF523x
MCF527x
MCF528x (e.g. MCF5282)
MC5328/9
MCF537x
MCF547x
MCF548x
MCF7113/16/19

Altera® FPGA Families
APEX™ 20K
Stratix® and Stratix II
Stratix GX and Stratix II GX
Cyclone™ and Cyclone II

Freescale® PowerQUICC™ Processors
MPC68xx
MPC8xx (selected parts)
MPC82xx
MPC83xx
MPC85xx
MPC52xx

Xilinx® FPGA Families
Virtex™-4 SX/LX/FX
Virtex-II and Virtex-II Pro
Virtex
Spartan™-3/IIE/II

National Semiconductor
2900 Semiconductor Drive
PO Box 58090
Santa Clara, CA 95052
1 408 721 5000

Visit our website at:
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