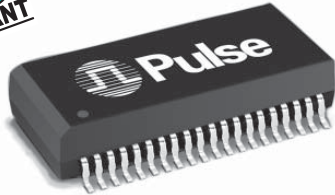





# 10/100BASE-TX QUAD PORT TRANSFORMER MODULES

## For Use with Transceivers Requiring 1:1 Transmit and Receive Turns Ratios



-  RoHS peak reflow temperature rating: 245°C
-  Meets IEEE 802.3 specification
-  Models designed to support four single or double-stacked RJ-45 connectors

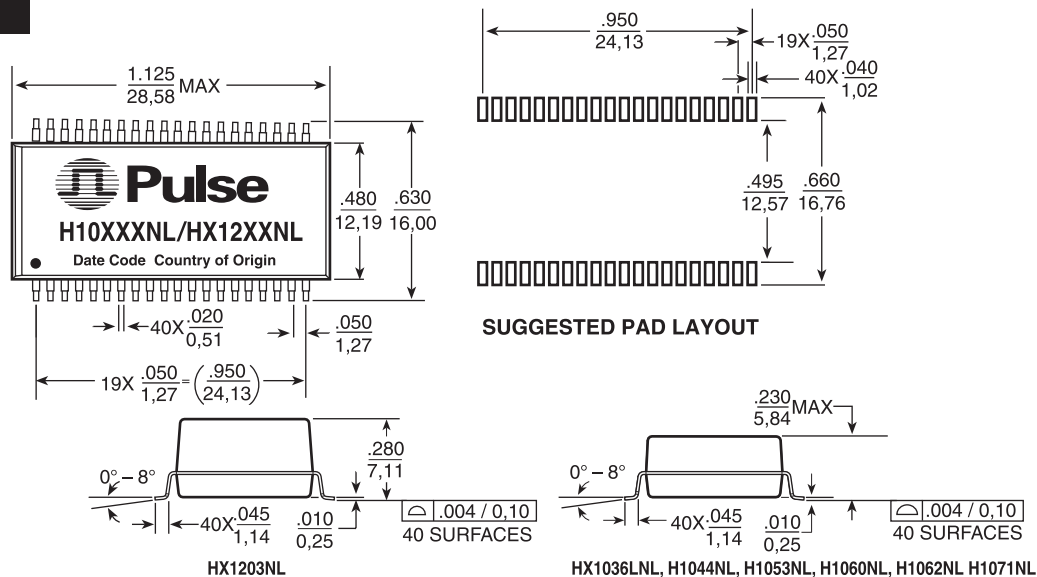
### Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS Compliant Part Number <sup>2</sup>	Insertion Loss (dB TYP)	Return Loss (dB TYP)				Crosstalk (dB TYP)				Common to Common Rejection Ratio 0.1-60 MHz (dB TYP)		Differential to Common Mode Rejection (dB TYP)	
		0.1-100 MHz	2-30 MHz	40 MHz	50 MHz	60-80 MHz	1 MHz	30 MHz	60 MHz	100 MHz	TX	RX	1-60 MHz
H1036LNL <sup>3d</sup>	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-30	-30	-40	-30
H1044NL <sup>3d</sup>	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-30	-30	-40	-30
H1053NL <sup>3d</sup>	-0.5	-21	-17	-14.5	-12	-65	-50	-40	-30	-30	-30	-40	-30
H1060NL <sup>3d</sup>	-0.5	-21	-17	-14.5	-12	-65	-50	-40	-30	-30	-30	-40	-30
H1062NL <sup>3d</sup>	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-30	-30	-40	-30
H1071NL <sup>3d</sup>	-0.5	-21	-17	-14.5	-12	-65	-50	-40	-30	-30	-30	-40	-30
HX1203NL <sup>1,3d</sup>	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-30	-30	-40	-30

1. **Operating** temperature -40° to +85°C.
2. **For Tape & Reel** packaging, add the suffix "T" to the end of the part number when ordering. e.g. H1044NLT.
3. **MSL** = Moisture Sensitivity Level a = 1, b = 2, c = 3, d = 4.

## Mechanical

### H1036NL



Weight . . . . . 4.0 grams TYP  
 Tube . . . . . 15/tube  
 Tape & Reel . . . . . 250/reel

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

# 10/100BASE-TX QUAD PORT TRANSFORMER MODULES

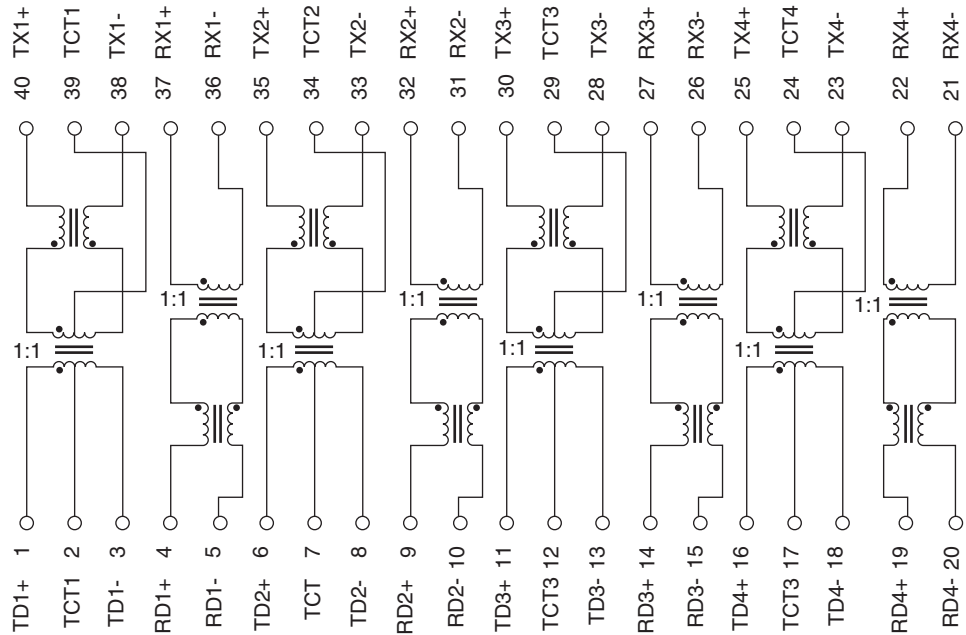
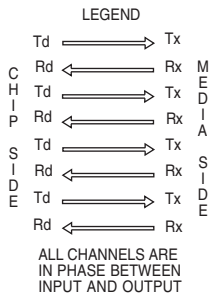


## For Use with Transceivers Requiring 1:1 Transmit and Receive Turns Ratios

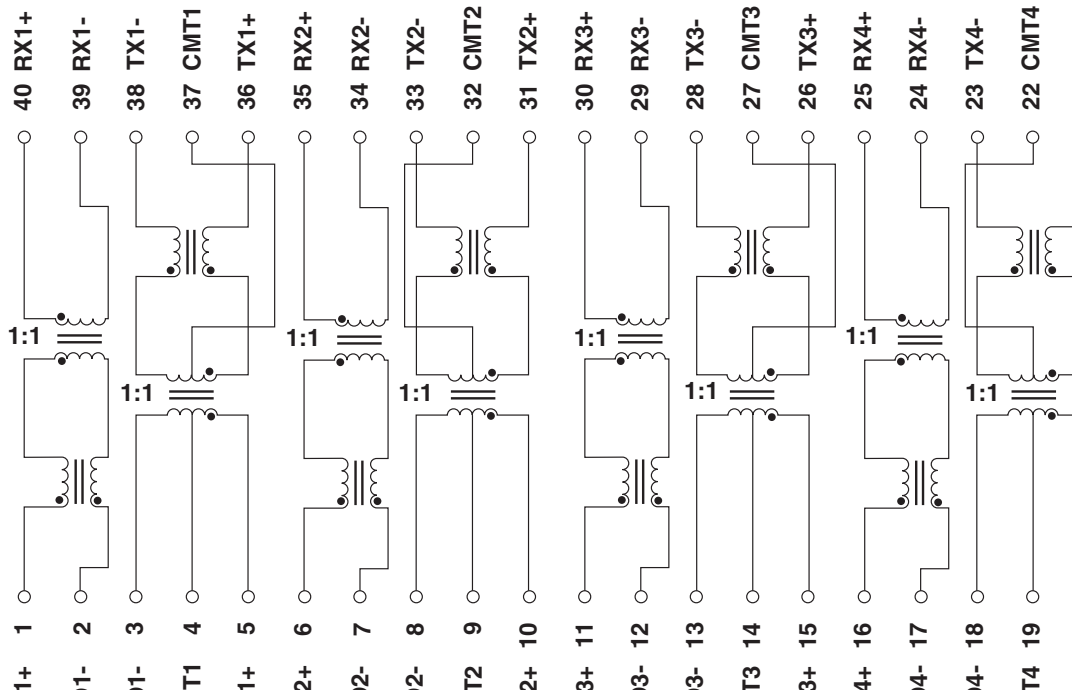
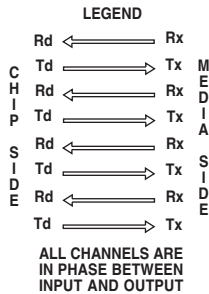
**Quad-Port Solutions:** The H1036L, H1044, H1053, H1060, H1062, and H1071NL are quad modules designed to support four single or double stacked RJ-45 connectors. Each has a different pinout for optimization in layout with various IC manufacturers.

### Schematics

#### H1036LNL



#### H1044NL



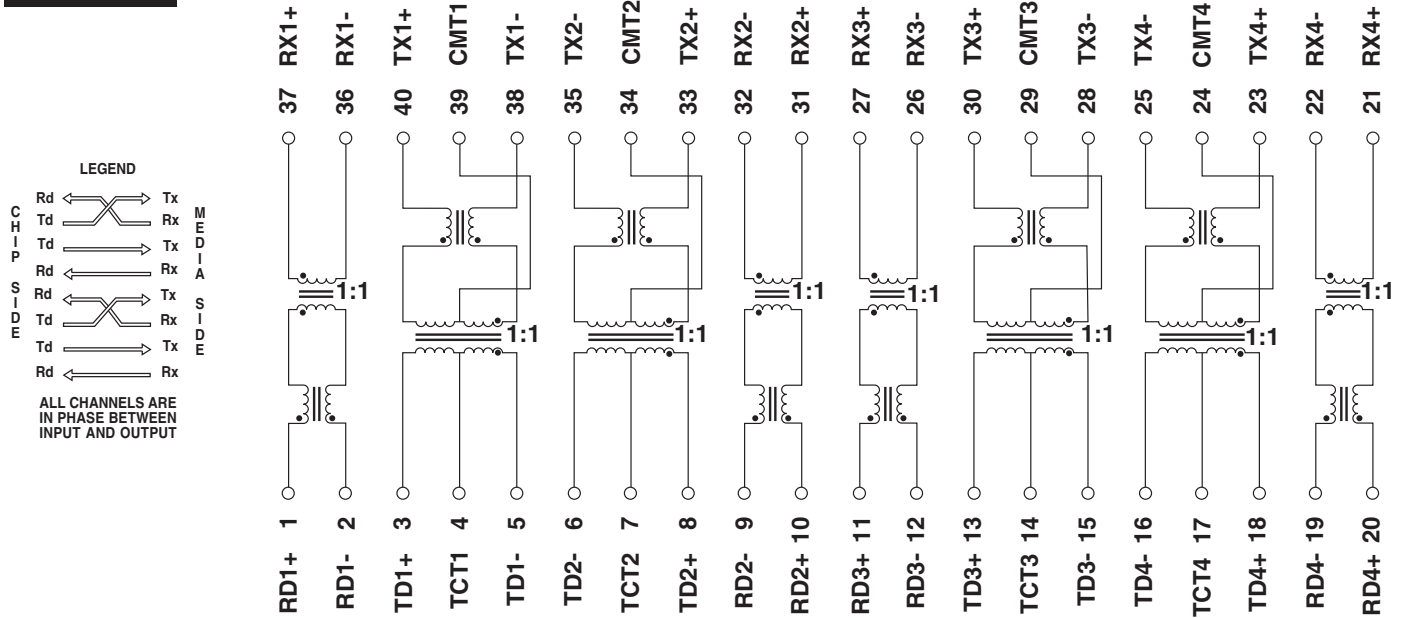
# 10/100BASE-TX QUAD PORT TRANSFORMER MODULES

For Use with Transceivers Requiring  
1:1 Transmit and Receive Turns Ratios

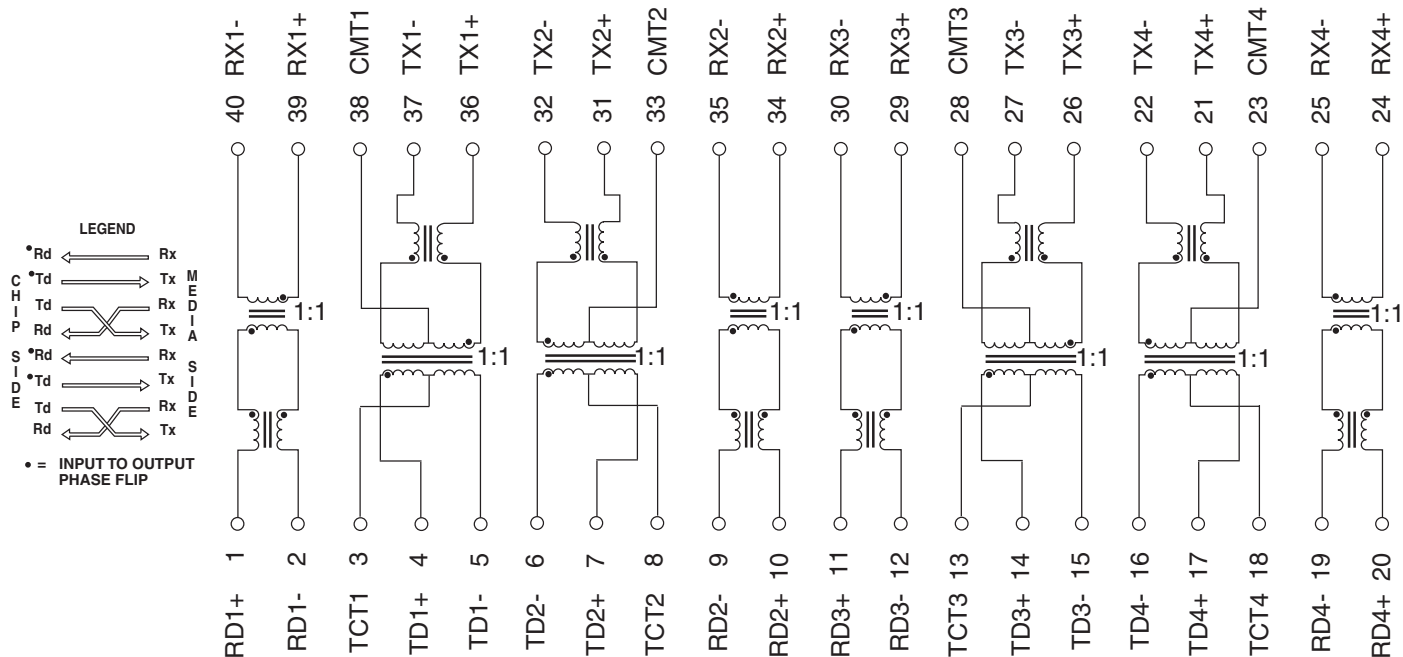


## Schematics

### H1053NL



### H1060NL

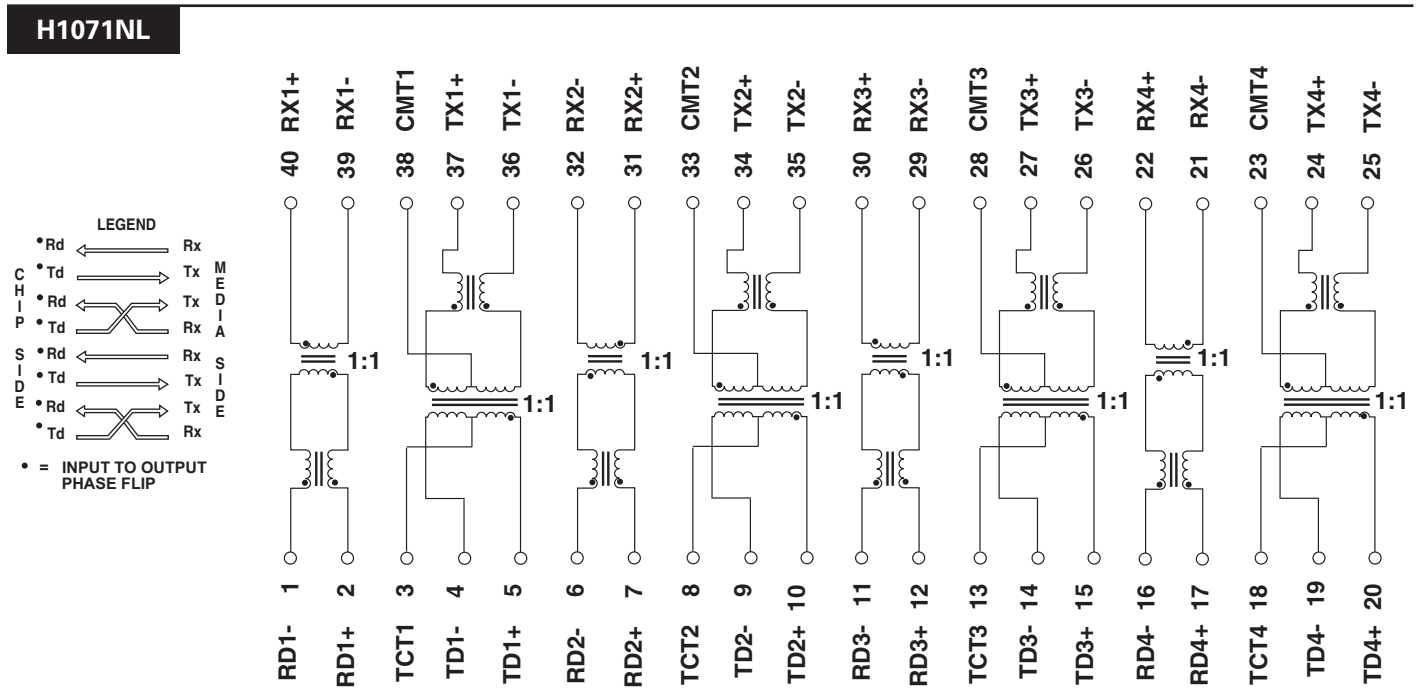
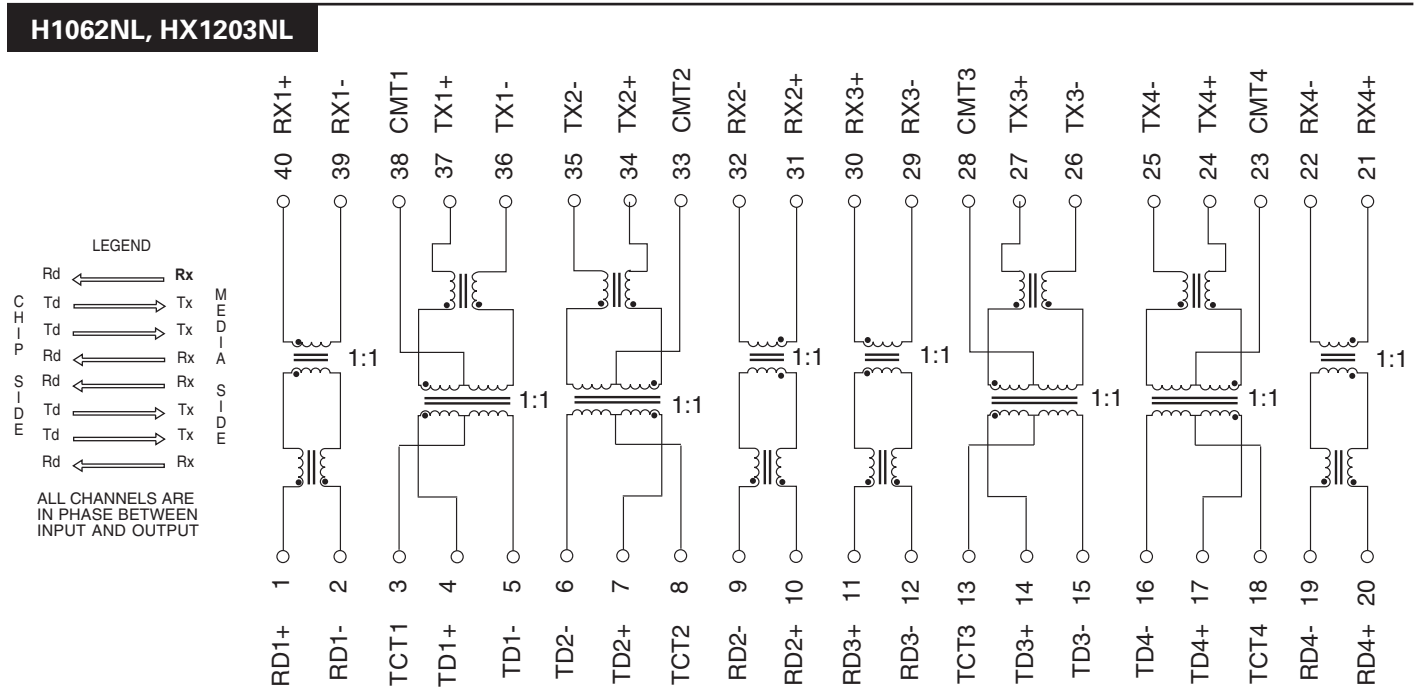


# 10/100BASE-TX QUAD PORT TRANSFORMER MODULES



For Use with Transceivers Requiring  
1:1 Transmit and Receive Turns Ratios

## Schematics



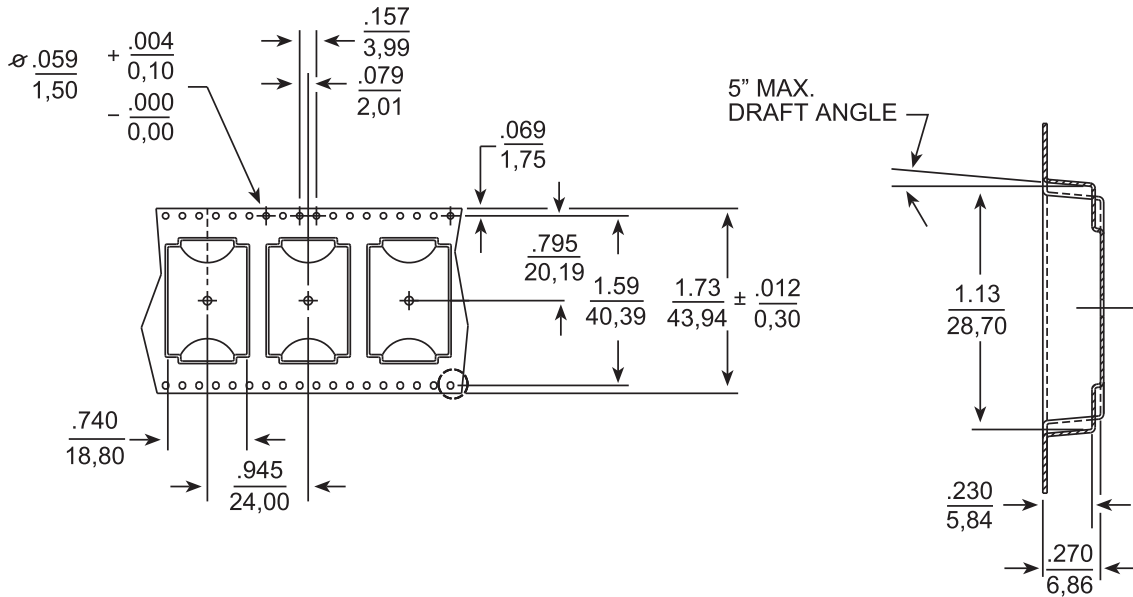
Downloaded from Elcodis.com electronic components distributor

# 10/100BASE-TX QUAD PORT TRANSFORMER MODULES

For Use with Transceivers Requiring  
1:1 Transmit and Receive Turns Ratios



## Tape & Reel Specifications



### For More Information:

#### Pulse Worldwide Headquarters

12220 World Trade Dr.  
San Diego, CA 92128  
U.S.A.

[www.pulseeng.com](http://www.pulseeng.com)  
Tel: 858 674 8100  
Fax: 858 674 8262

#### Pulse Europe

Einsteinstrasse 1  
D-71083 Herrenberg  
Germany

Tel: 49 7032 7806 0  
Fax: 49 7032 7806 135

#### Pulse China Headquarters

B402, Shenzhen Academy of  
Aerospace Technology Bldg.  
10th Kejinan Rd.  
Hwigh-Tech Zone  
Nanshan District  
Shenzen, PR China 518057

TEL: 86 755 33966678  
FAX: 86 755 33966700

#### Pulse North China

Room 2704/2705  
Super Ocean Finance Ctr.  
2067 Yan An Rd. West  
Shanghai 200336  
China

Tel: 86 21 62787060  
Fax: 86 2162786973

#### Pulse South Asia

135 Joo Seng Rd.  
#03-02  
PM Industrial Bldg.  
Singapore 368363

TEL: 65 6287 8998  
FAX: 65 6280 0080

#### Pulse North Asia

No. 26, Kao Ching Rd.  
Yang Mei Chen  
Taoyuan Hsien  
Taiwan  
R. O. C.

Tel: 886 3 4643715  
Fax: 886 3 4641911

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners.

© Copyright, 2009. Pulse Engineering, Inc. All rights reserved.

[www.pulseeng.com](http://www.pulseeng.com)