LAN DISCRETE TRANSFORMER MODULES

Pulse Discrete Transformer Modules

Pulse offers the most comprehensive line of discrete LAN transformer modules available to the OEM worldwide. Modules for 10/100/1000BASE-T are optimized for all major LAN transceivers. All modules provide electrical circuit isolation that meets IEEE 802.3, while maintaining signal integrity needed for the most demanding applications.

Pulse manufactures the broadest selection of packaging options, from through hole (THT) SIL devices to the smallest available surface mount (SMT) solution at .078" (1.98 mm). For RoHS compliant products, please refer to individual data sheets for details.

NOTE: This catalog section serves as an overview to the LAN discrete modules. For detailed data sheets and a complete list of LAN discrete modules, please go to the Pulse website home page and click the link on the left that says "DATA SHEETS."

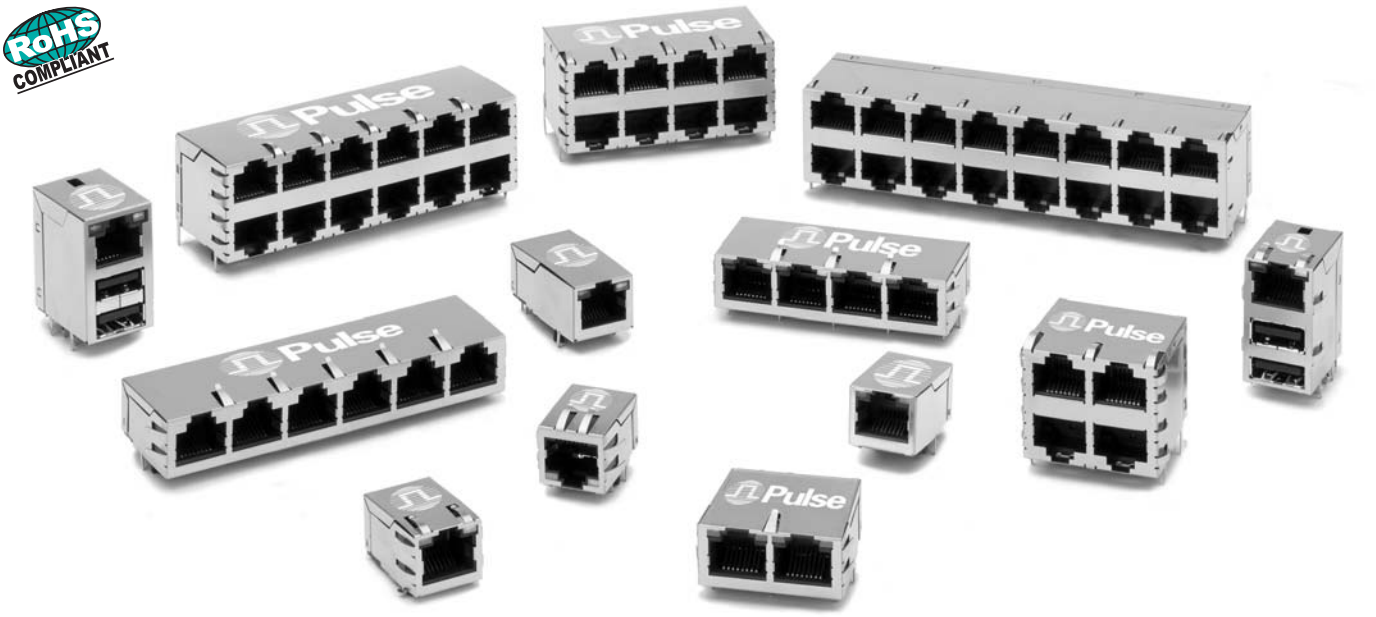
For the reader's convenience and to locate multiple platforms easily, view the IC Cross References that start on page 29.

DISCRETE SMT TRANSFORMER MODULES

Number of Ports	Single			Dual		Quad	
Data Rate	**10Base-T**	**10/100TX**	**Gigabit**	**10/100TX**	**Gigabit**	**10Base-T**	**10/100TX**
Data Sheet Number	E103 (low profile) E112 (ext. temp.) E115 (1:1 TR) EC100 (SMT, THT)	H303 (1:1 TR) H304 (low profile) H314 (var. TR) H315 (2:1 TR) H325 (var. TR) H326 (var. TR) H327 (PoE) H328 (1:1 TR) H342 (1:1 TR) H600 (1:1 TR)	HC500 (1:1 TR) H504 (low profile) H544 (1:1 TR) H546 (small footprint) H601 (PoE) H551 (quad/dual)	H322 (1:1 TR) H327 (PoE) H600 (1:1 TR)	HC500 (1:1 TR) H601 (PoE) H551 (quad/dual)	EC101 (var. TR)	H313 (1.41:1 TR) H316 (1:1 TR) H321 (2:1 TR) H327 (PoE) H328 (1:1 TR) H600 (1:1 TR)

***For** common mode chokes, see data sheet number G002 at **http://www.pulseeng.com/products/datasheets/G002.pdf**.*

LAN FILTERED CONNECTORS



PulseJack™ Filtered Connectors

Pulse offers a broad selection of PulseJack filtered connectors that integrate network magnetics with combinations of RJ45 and USB connectors. In addition to connectivity, these filtered connectors provide signal conditioning, signal isolation and EMI suppression. Designed to meet IEEE 802.3, the PulseJack connectors offer a complete family of single- and multi-port solutions in high-speed applications, including 10/100/1000BASE-T, PoE and other emerging applications. For RoHS compliant products, please refer to the individual data sheets for details.

NOTE: This catalog section serves as an overview to the LAN PulseJack filtered connectors. For detailed data sheets and a complete list of PulseJack filtered connectors, please go to this URL: *http://www.pulseeng.com/products/datasheets.aspx.*

For the readers convenience and to locate multiple platforms easily, view the IC Cross References starting on page 29.

RJ45 FILTERED CONNECTORS

Number of Ports	One Port					1 by 2, 4, 6, 8		2 by 2, 4, 6, 8		One RJ45/dual USB	
Locking Tab Up/Down	Down		Up			Down	Up	N/A		Up	
PCB Mounting Type	THT	SMT	THT		SMT	THT		THT		THT	
Data Rate	10/100TX	10/100TX	10/100TX	Gigabit	10/100TX	10/100TX	Gigabit	10/100TX	Gigabit	10/100TX	Gigabit
Data Sheet Number	J403 J414	J409	J402 J415 (PoE)	J411	J409	J404 J416 (PoE)	J410	J401	J405 J422	J408	J408

LAN GIGABIT IC CROSS REFERENCE

Pulse® A TECHNITROL COMPANY

DISCRETE COMPONENTS & INTEGRATED MODULES										RJ45 & RJ45/USB PLATFORMS [B]							
IC				Single [A]		Dual [A]		Quad [A]		1x1		1xN		2xN		RJ45/USB	
Manufacturer	Part Number	Ports	Notes	Part Number	Data Sheet	Part Number	Data Sheet	Part Number	Datat Sheet	Part Number	Data Sheet	Part Number	Data Sheet	Part Number	Data Sheet	Part Number	Data Sheet
Agere	ET1011, ET1012 ET1081 ET1310 ET2005-40/50 ET2008-30/40/50 ET3028-50 ET3048-50 ET4028-50 ET4048-50 ET4100 ET4128-50 ET4148-50 ET4001/4101 ET5028-50 ET5048-50 ET5128-50 ET5148-50 GEP11-68	1 8 1 5 5 28 48 28 48 24 28+2 48+2 48 28 48 28+2 48+2	PHY PHY MAC/PHY Switch/PHY Switch/PHY Switch Switch Switch Switch Switch Switch 1G/10G Switch 1G/10G Switch Switch Switch Switch 1G/10G Switch 1G/10G PHY	H5007 H5062 H5004 H5077 H6062	HC500 H601 HC500 H546 H601	H5012 H5020 [1] H5014 H6080 H5200	HC500 HC500 HC500 H601 H551	H5400	H551	JK0 Series [2,C]	J411	JG0 Series [3,C]	J410	JC0 Series [4,C]	J405*	JW0 Series [D]	J408
Broadcom	BCM5400, BCM5401 BCM5411/21/21S BCM5460/61 BCM5701/02/03/04/05 BCM5707/21/51 BCM5402 BCM5404/14/24 BCM5434/35/64/64S BCM5478/5487/5488 BCM5345/46/47/48 BCM5384/85/88 BCM54980	1 1 1 1 1 2 4 4 8 24, 16, 5 8, 5, 4 8	PHY PHY PHY MAC/PHY MAC/PHY PHY PHY PHY PHY Switch Switch PHY	H5007 H5062 H5004 H6062	HC500 H601 HC500 H601	H5012 H5020 [1] H5014 H6080 H5201	HC500 HC500 HC500 H601 H551	H5401	H551	JK0 Series [2,C]	J411	JG0 Series [3,C]	J410	JC0 Series [4,C]	J405*	JW0 Series [D]	J408
Intel	82540/ 541/544/543 82544/545/546/547 82570	1 1 1	MAC/PHY MAC/PHY MAC/PHY	H5007 H5062 H5077	HC500 H601 H546	H5012 H5020 [1] H6080 H5200	HC500 HC500 H601 H551	H5400	H551	JK0 Series [2,C]	J411	JG0 Series [3,C]	J410	JC0 Series [4,C]	J405*	JW0 Series [D]	J408
LSI Logic	L80600 L80601	1 1	PHY PHY	H5007 H5062	HC500 H601	H5012 H5201 H5020 [1]	HC500 H551 HC500	H5401	H551	JK0 Series [2,C]	J411	JG0 Series [3,C]	J410	JC0 Series [4,C]	J405*	JW0 Series [D]	J408

NOTE: Part** number **JC0-0019** is found on data sheet **J422.

1. ***Compact** foot print dual magnetic cross reference*
2. ***Single** port THT tab-up connector cross reference*
3. ***Multiport** 1byN THT tab-up connector cross reference*
4. ***Multiport** THT 2byN connector cross reference*
5. ***RJ45/USB** single port THT tab-up connector cross reference*

*A. **RX** turns ratio is 1:1, TX turns ratio is 1:1, unless otherwise specified.*

*B. **One** part is identified in this cross reference. Multiple parts with different platforms can be found on the referenced data sheet.*

*C. **For** detailed information about this series, e-mail: prodinfo_lan@pulseeng.com or call Pulse and ask for LAN Applications*

*D. **LED** colors (Green/Yellow, Green-Orange/Yellow)*

***NOTE: Most** Pulse products can be manufactured to comply with the RoHS (Restriction of Hazardous Substances) directive. These parts are identified by adding the suffix "NL" at the end of the part number.*

SMT - Surface Mount Package **THT** - Through Hole Package

LAN GIGABIT IC CROSS REFERENCE *(continued)*

	IC			DISCRETE COMPONENTS & INTEGRATED MODULES						RJ45 & RJ45/USB PLATFORMS [B]							
				Single [A]		Dual [A]		Quad [A]		1x1		1xN		2xN		RJ45/USB	
Manufacturer	Part Number	Ports	Notes	Part Number	Data Sheet	Part Number	Data Sheet	Part Number	Datat Sheet	Part Number	Data Sheet	Part Number	Data Sheet	Part Number	Data Sheet	Part Number	Data Sheet
Marvell Semiconductor	88E1010/1011S 88E1111/1112 88E1040/1040S/1041 88E1041S/1042/1042S 88E1141/1145/1149 88E8000/05/06 88E6045 88E6122 88E8022/36/50/62	1 1 4 4 8 8 2 6 8	PHY PHY PHY PHY PHY MAC/PHY PHY PHY MAC/PHY	H5007 H5062 H5077 H6062	HC500 H601 H546 H601	H5012 H5020 [1] H6080 H5200	HC500 HC500 H601 H551	H5400	H551	JK0 Series [2, C]	J411	JG0 Series [3, C]	J410	JC0 Series [4, C]	J405*	JW0 Series [D]	J408
Micrel	KS9020	1	MAC/PHY	H5007 H5062	HC500 H601	H5012 H5020 [1] H5201	HC500 HC500 H551	H5401	H551	JK0 Series [2, C]	J411	JG0 Series [3, C]	J410	JC0 Series [4, C]	J405*	JW0 Series [D]	J408
Mysticom	MY1001	1	PHY	H5007 H5062	HC500 H601	H5012 H5020 [1] H5201	HC500 HC500 H551	H5401	H551	JK0 Series [2, C]	J411	JG0 Series [3, C]	J410	JC0 Series [4, C]	J405*	JW0 Series [D]	J408
National Semiconductor	DP83865 DP83864	1 4	PHY PHY PHY	H5007 H5062 H6062	HC500 H601 H601	H5012 H5020 [1] H6080 H5200	HC500 HC500 H601 H551	H5400	H551	JK0 Series [2, C]	J411	JG0 Series [3, C]	J410	JC0 Series [4, C]	J405*	JW0 Series [D]	J408
Realtek	RLT8211/12 RLT8169 RTL8100E/01E/10/11B	1 1	PHY MAC/PHY	H5007 H5062	HC500 H601	H5012 H5020 [1] H5201	HC500 H503 H551	H5401	H551	JK0 Series [2, C]	J411	JG0 Series [3, C]	J410	JC0 Series [4, C]	J405*	JW0 Series [D]	J408
Vitesse Semiconductor	VSC8201/8211 VSC8221/8601/8641 VSC8204/24/34/44 VSC8558/8538 VSC7380/7384 VSC7388/7398 VSC7385/7395/7396 VSC7389/7391 VSC7390 VSC7301/7303	1 1 4 8 8, 12 8 5 16 24 16, 24	PHY P5HY PHY PHY GbE switch PHY PHY PHY PHY GbE switch	H5007 H5062 H5084 H6062 H5008 H5014	HC500 H601 H544 H601 HC500 HC500	H5012 H5020 [1] H6080 H5012 H5200	HC500 HC500 H601 HC500 H551	H5400	H551	JK0 Series [2, C]	J411	JG0 Series [3, C]	J410	JC0 Series [4, C]	J405*	JW0 Series [D]	J408

NOTE: Part** number **JC0-0019** is on data sheet **J422.

1. ***Compact** foot print dual magnetic cross reference*
2. ***Single** port THT tab-up connector cross reference*
3. ***Multiport** 1byN THT tab-up connector cross reference*
4. ***Multiport** THT 2byN connector cross reference*
5. ***RJ45/USB** single port THT tab-up connector cross reference*

*A. **RX** turns ratio is 1:1, TX turns ratio is 1:1, unless otherwise specified.*

*B. **One** part is identified in this cross reference. Multiple parts with different platforms can be found on the referenced data sheet.*

*C. **For** detailed information about this series, e-mail: prodinfo_lan@pulseeng.com or call Pulse and ask for LAN Applications at 858-674-8100*

*D. **LED** colors (Green/Yellow, Green-Orange/Yellow)*

***NOTE: Most** Pulse products can be manufactured to comply with the RoHS (Restriction of Hazardous Substances) directive. These parts are identified by adding the suffix "NL" at the end of the part number.*

SMT - Surface Mount Package **THT** - Through Hole Package

LAN 10/100BASE-TX IC CROSS REFERENCE

Pulse® A TECHNITROL COMPANY

IC Manufacturer	IC Part Number	IC Ports	IC Note	Turns Ratio[A] TX	DISCRETE COMPONENTS: Single Part Number	Single Data Sheet	Dual Part Number	Dual Data Sheet	Quad Part Number	Quad Data Sheet	RJ45 & RJ45/USB PLATFORMS[B]: 1x1 Part Number	1x1 Data Sheet	1xN Part Number	1xN Data Sheet	2xN Part Number	2xN Data Sheet	RJ45/USB[7] Part Number	RJ45/USB[7] Data Sheet
Agere	ET901	1	PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	ET908	8	PHY	1:1	H1260	H600	HX1294	H322			J1006F21[3]	J402	J8064D628[6]	J404			JY0-0016[D]	J408
					H1112	H326	H2005A[2]	H327			JV006I21[4]	J409						
					H1012	H325					J3006G21D[5]	J409						
					HX1148	H303					J0C-0003[4]	J409						
					HX1188[1]	H325					J0018D21[3]	J403						
					H2019[2]	H327					J3018G21D[5]	J409						
					H0026	H304												
					PE-69012[E]	H304												
AMD	AM79C874/C875	1	PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	AM79C971/972/C973/	1	PHY	1:1	H1260	H600	HX1294	H322			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
	AM79C975/C976/C977	1	PHY	1:1	H1112	H326	H2005A[2]	H327			JV006I21[4]	J409						
				1:1	H1012	H325					J3006G21D[5]	J409						
				1:1	HX1148	H303					J0C-0003[4]	J409						
				1:1	HX1188[1]	H325					J0018D21[3]	J403						
				1:1	H2019[2]	H327					J3018G21D[5]	J409						
				1:1	H0026	H304												
				1:1	PE-69012[E]	H304												
	AM79C874	1	PHY	1:1.414	H1081	H314												
Broadcom	AC101, AC101L	1	PHY	1:1	H1102	H325	H1270	H322	H1164[2]	H328	J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	AC131		PHY	1:1	H1012	H303	HX1294	H322	H1164[2]	H328								
	BCM5241	1	PHY	1:1	HX1148	H303	H2005A[2]	H327	H1259	H600								
	BCM5220/ 5221	1	PHY	1:1	H1012	H303	HX1294	H322			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
	BCM5222	2	PHY	1:1	HX1148	H303	H2005A[2]	H327			JV006I21[4]	J409						
	BCM1100/1101/1112/1190	2	VoIP/PoE	1:1	H2019[2]	H327	H2009[2]	H327			J3006G21D[5]	J409						
	BCM1115	1	MAC/PHY	1:1	PE-69012[E]	H304					J0C-0003[4]	J409						
	BCM6345/6348	1	MAC/PHY	1:1	HX1188[1]	H325					J0011D21B[3]	J403						
	BCM5350/5380	8	Switch	1:1	H1260	H600					JV011I21[4]	J409						
	AC104, BCM5208R	4	PHY	1:1	H1260	H600	H2009[2]	H327	H1164[2]	H328	J00-0014[3]	J414	J8064E64[6]	J404	J2045H3A[C]	J401		
	AC205/206	5	PHY	1:1	H1112	H326			H1259	H600	J1012F21K[3]	J402	J8064E66[6]	J404	J2045H3B[C]	J401		
	BCM5315/5325(M)/5365	5	MAC/PHY	1:1	HX1188[1]	H325			HX1234[2]	H328			J8064E68[7]	J404	J2045H3C[C]	J401		
	BCM5226	6	PHY	1:1	H1102	H325			H2017[2]	H327			J8064D648A[6]	J404				
	BCM5248	8	PHY	1:1														
	AC207/208	8	PHY	1:1	H2019[2]	H327							J8064D668A[6]	J404				
	BCM5228/5238/5248	8	PHY	1:1									J8064D688A[6]	J404				
	BCM5318/5338	8	MAC/PHY	1:1														
	BCM5384	4	Switch	1:1	H0042[2]	H304												
	BCM5721	1	PHY	1:1														
	BCM5347/5348	48	PHY	1:1														

1. ***Extended*** *temperature single port discrete magnetic cross reference*
2. ***PoE / VoIP*** *single port discrete magnetic cross reference*
3. ***Single*** *port THT tab-up/down connector cross reference*
4. ***Single*** *port SMT tab-down connector cross reference*
5. ***Single*** *port SMT tab-up connector cross reference*
6. ***Multiport*** *1byN THT tab-down connector cross reference*
7. ***RJ45/USB*** *single port THT tab-up connector cross reference*

A. RX *turns ratio is 1:1, TX turns ratio is 1:1, unless otherwise specified.*

B. One *part is identified in this cross reference. Multiple parts with different platforms can be found on the referenced data sheet.*

C. Multiport *2byN THT connector cross reference (A=2x4, B=2x6, C=2x8)*

D. LED *colors (Green/Yellow, Green-Orange/Yellow)*

E. Low *profile (PCMCIA)*

NOTE: Most *Pulse products can be manufactured to comply with the RoHS (Restriction of Hazardous Substances) directive. These parts are identified by adding the suffix "NL" at the end of the part number.*

SMT - Surface Mount Package **THT** - Through Hole Package

LAN 10/100BASE-TX IC CROSS REFERENCE *(continued)*

IC Manufacturer	IC Part Number	IC Ports	IC Note	Turns Ratio[A] TX	DISCRETE COMPONENTS: Single Part Number	Single Data Sheet	Dual Part Number	Dual Data Sheet	Quad Part Number	Quad Data Sheet	RJ45 & RJ45/USB PLATFORMS[B]: 1x1 Part Number	1x1 Data Sheet	1xN Part Number	1xN Data Sheet	2xN Part Number	2xN Data Sheet	RJ45/USB[7] Part Number	RJ45/USB[7] Data Sheet
Cirrus Logic	CS8952	1	PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	CS8952T	1	PHY	1:1	H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
				1:1	HX1188[1]	H325	H2009[2]	H327			JV006I21[4]	J409						
				1:1	HX2019[2]	H327					J3006G21D[5]	J409						
				1:1	PE-69012[E]	H304					J0C-0003[4]	J409						
Davicom	DM9161	1	PHY	1:1	H1012	H325	H1270	H322	H1036	H316	J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	DM9102A	1	MAC/PHY	1:1	H1265	H600					J3006G21D[5]	J409	J8064D628A[6]	J404				
	DM9601	1	MAC/PHY	1:1	H1102	H325					J0C-0003[4]	J409	JG0-0031[6]	J416				
	DM9301/9331	1	PHY	1:1	HX1188[1]	H325												
					H2019[2]	H327												
					HX2019[2]	H327												
					PE-69012[E]	H304												
IC+	3097-F, 3299A	1	PHY	1:1	H1102	H325	H1270	H322	H1164[2]	H328	J0006D21[3]	J403	J8064E62[6]	J404	J2045H3A[C]	J401	JW0-0009[D]	J408
	IP100A	1	PHY	1:1	H1260	H600	H2005A[2]	H327	H1259	H600	J1006F21[3]	J402	J8064D628A[6]	J404	J2045H3B[C]	J401	JY0-0016[D]	J408
	IP108	8	PHY	1:1	HX1188[1]	H325	H2009[2]	H327	HX1234[1]	H328	JV006I21[4]	J409	J8064D628A[6]	J404	J2045H3C[C]	J401		
	IP1726	26	PHY	1:1	HX2019[2]	H327			H2017[2]	H327	J3006G21D[5]	J409	J8064D648A[6]	J404				
	IP101	1	PHY	1:1	PE-69012[E]	H304					J0C-0003[4]	J409						
ICS	ICS1890/1891	1	PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	ICS1893	1	PHY	1:1	H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
					HX1188[1]	H325	H2009[2]	H327			JV006I21[4]	J409						
					H1012	H303					J3006G21D[5]	J409						
					HX2019[2]	H327					J0C-0003[4]	J409						
					PE-69012[E]	H304												
Infineon	PSB21553	2	PoE/PHY	1:1			H2006A[2]	H327							J20 Series	J401		
(AMDTek)	ADM8511/8513/9511	1	PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404			JW0-0009[D]	J408
	ADM9513, AN983B	1	PHY	1:1	H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
	AN985B/L autoMDX	1	PHY	1:1	HX1188[1]	H325	H2009[2]	H327			JV006I21[4]	J409						
					H2019[2]	H327	HX1294	H322			J3006G21D[5]	J409						
											J0C-0003[4]	J409						
	ADM6305,	5	PHY	1:1	H1260	H600			H1164[2]	H328			J8064E64[6]	J404	J2045H3A[C]	J401		
	ADM6308/6326/6509	8	PHY	1:1					H1259	H600			J8064E68[6]	J404	J2045H3B[C]	J401		
	ADM6609/6909	8.9	PHY	1:1					HX1234[1]	H328			J8064D648A[6]	J404	J2045H3C[C]	J401		
	ADM6996L	5	PHY	1:1					H2017[2]	H327			J8064D688A[6]	J404				
Intel	82551/2551QM/551ER	1	MAC/PHY	1:1	H1102	H325	H1270	H322	H1164[2]	H328	J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	82562/562EZ/550	1	MAC/PHY	1:1	H1260	H600	H2005A[2]	H327	H1259	H600	J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
	82559/559ER	1	MAC/PHY	1:1	HX1188[1]	H325	H2009[2]	H327	HX1234[1]	H328	JV006I21[4]	J409						
	LXT970A/971(ALC)/972A	1	PHY	1:1	H1112	H326					J3006G21D[5]	J409						
	LXT973	2	PHY	1:1	H2019[2]	H327					J0C-0003[4]	J409						
	LXT972	1	PHY	1:1	PE-69012[E]	H304					J00-0014[3]	J414						

1. ***Extended*** *temperature single port discrete magnetic cross reference*
2. ***PoE / VoIP*** *single port discrete magnetic cross reference*
3. ***Single*** *port THT tab-up/down connector cross reference*
4. ***Single*** *port SMT tab-down connector cross reference*
5. ***Single*** *port SMT tab-up connector cross reference*
6. ***Multiport*** *1byN THT tab-down connector cross reference*
7. ***RJ45/USB*** *single port THT tab-up connector cross reference*

A. TRX *turns ratio is 1:1, TX turns ratio is 1:1, unless otherwise specified.*

B. One *part is identified in this cross reference. Multiple parts with different platforms can be found on the referenced data sheet.*

C. Multiport *1byN THT connector cross reference (A=2x4, B=2x6, C=2x8)*

D. LED *colors (Green/Yellow, Green-Orange/Yellow)*

E. Low *profile (PCMCIA)*

NOTE: Most *Pulse products can be manufactured to comply with the RoHS (Restriction of Hazardous Substances) directive. These parts are identified by adding the suffix "NL" at the end of the part number.*

SMT - Surface Mount Package **THT** - Through Hole Package

LAN 10/100BASE-TX IC CROSS REFERENCE *(continued)*

Pulse® A TECHNITROL COMPANY

IC Manufacturer	IC Part Number	IC Ports	IC Note	Turns Ratio[A] TX	DISCRETE COMPONENTS: Single Part Number	Single Data Sheet	Dual Part Number	Dual Data Sheet	Quad Part Number	Quad Data Sheet	RJ45 & RJ45/USB PLATFORMS[B]: 1x1 Part Number	1x1 Data Sheet	1xN Part Number	1xN Data Sheet	2xN Part Number	2xN Data Sheet	RJ45/USB[7] Part Number	RJ45/USB Data Sheet
LSI	L80223	1	PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	L80225	1	PHY	1:1	H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
	L80227	1	PHY	1:1	HX1188[1]	H325	H2009[2]	H327			JV006I21[4]	J409						
					H2019[2]	H327					J3006G21D[5]	J409						
					H1012	H303					J0C-0003[4]	J409						
					PE-69012[E]	H304												
Marvell	88E6021	3	PHY	1:1	H1102	H325	H1270	H322	H1164[2]	H328	J0006D21[3]	J403	J8064E64[6]	J404	J2045H3A C	J401	JW0-0009[D]	J408
	88E6051	5	PHY	1:1	H1260	H600	H2005A[2]	H327	H1259	H600	J1006F21[3]	J402	J8064E68[6]	J404	J2045H3B C	J401	JY0-0016[D]	J408
	88E6060/88E6218	5/6	PHY	1:1	HX1188[1]	H325	H2009[2]	H327	HX1234[1]	H328	JV006I21[4]	J409	J8064D648A[6]	J404	J2045H3C C	J401		
	88E6052, 88E6063	5/6/7	PHY	1:1	H2019[2]	H327			H2017[2]	H327	J3006G21D[5]	J409	J8064D688A[6]	J404				
	88E3081/3082/3083	8	PHY	1:1	PE-69012[E]	H304					J0C-0003[4]	J409						
	88E6083	10	Switch	1:1	H1183	H325					JK0654218Z	J411						
	88E6095	8	Switch	1:1														
MICREL	KS8721B/21BL/37	1	PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	KS8993/8993M/8993F	3	MAC/PHY	1:1	H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
	KS8737	1	PHY	1:1	HX1188[1]	H325	H2009[2]	H327			JV006I21[4]	J409						
					H2019[2]	H327	H2006A[2]	H327			J3006G21D[5]	J409						
					PE-69012[E]	H304					J0C-0003[4]	J409						
											J1011F01P[3]	J402						
	KS8695P	5	PHY	1:1			H2009[2]	H327	H1164[2]	H328			J8064E64[6]	J404	J2045H3A C	J401	JW0-0009[D]	J408
	KS8995/95M/95MA/95E	5	MAC/PHY	1:1			H1270	H322	H1259	H600			J8064E68[6]	J404	J2045H3B C	J401	JY0-0016[D]	J408
	KS8995X	5	MAC/PHY	1:1					HX1234[1]	H328			J8064D648A[6]	J404	J2045H3C C	J401		
	KS8997/KS8998	8	MAC/PHY	1:1					H2017[2]	H327			J8064D688A[6]	J404				
	KS8999	9	MAC/PHY	1:1														
MicroLinear	ML6652	1	AutoMDX	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
					H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A 6	J404			JY0-0016[D]	J408
					HX1188[1]	H325	H2009[2]	H327			JV006I21[4]	J409						
							H2019[2]	H327			J3006G21D[5]	J409						
					PE-69012[E]	H304					J0C-0003[4]	J409						
Myson	MTD971	1	PHY	1:1	H1102	H325	H1270	H322	H1164[2]	H328	J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	MTD972	1	PHY	1:1	H1260	H600	H2005A[2]	H327	H1259	H600	J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
	MTD981	1	PHY	1:1	HX1188[1]	H325	H2009[2]	H327	HX1234[1]	H328	JV006I21[4]	J409						
					H2019[2]	H327			H2017[2]	H327	J3006G21D[5]	J409						
					PE-69012[E]	H304					J0C-0003[4]	J409						
Mysticom	MystiPHY110	1	PHY	1:1	H1102	H325	H1270	H322	H1164[2]	H328	J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
					H1260	H600	H2005A[2]	H327	H1259	H600	J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
					HX1188[1]	H325	H2009[2]	H 327	HX1234[1]	H328	JV006I21[4]	J409						
					H2019[2]	H327			H2017[2]	H327	J3006G21D[5]	J409						
					PE-69012[E]	H304					J0C-0003[4]	J409						

1. ***Extended*** *temperature single port discrete magnetic cross reference*
2. ***PoE / VoIP*** *single port discrete magnetic cross reference*
3. ***Single*** *port THT tab-up/down connector cross reference*
4. ***Single*** *port SMT tab-down connector cross reference*
5. ***Single*** *port SMT tab-up connector cross reference*
6. ***Multiport*** *1byN THT tab-down connector cross reference*
7. ***RJ45/USB*** *single port THT tab-up connector cross reference*

A. RX *turns ratio is 1:1, TX turns ratio is 1:1, unless otherwise specified.*

B. One *part is identified in this cross reference. Multiple parts with different platforms can be found on the referenced data sheet.*

C. Multiport *2byN THT connector cross reference (A=2x4, B=2x6, C=2x8)*

D. LED *colors (Green/Yellow, Green-Orange/Yellow)*

E. Low *profile (PCMCIA)*

NOTE: Most *Pulse products can be manufactured to comply with the RoHS (Restriction of Hazardous Substances) directive. These parts are identified by adding the suffix "NL" at the end of the part number.*

SMT - Surface Mount Package **THT** - Through Hole Package

LAN 10/100BASE-TX IC CROSS REFERENCE *(continued)*

IC Manufacturer	IC Part Number	IC Ports	IC Note	Turns Ratio[A] TX	DISCRETE COMPONENTS: Single Part Number	Single Data Sheet	Dual Part Number	Dual Data Sheet	Quad Part Number	Quad Data Sheet	RJ45 & RJ45/USB PLATFORMS[B]: 1x1 Part Number	1x1 Data Sheet	1xN Part Number	1xN Data Sheet	2xN Part Number	2xN Data Sheet	RJ45/USB[7] Part Number	RJ45/USB[7] Data Sheet
National Semiconductor	DP83847	1	PHY	1:1	H1102	H325	H1270	H322	H1164 2	H328	J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	DP83848	1	PHY	1:1	H1012	H303	HX1294	H322	H1036L	H316	J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
	DP83816 (macphyter II)	1	MAC/PHY	1:1			HX1148	H303	H2005A 2	H327	H1259	H600	J1006D21[6]	J402				
					H1260	H600	H2009[2]	H327	HX1234 1	H328	JV006I21[4]	J409						
					HX1188[1]	H325			H2017 2	H327	JV006I21[4]	J409						
					H2019[2]	H327					J3006G21D[5]	J409						
					PE-69012[E]	H304					J0C-0003[4]	J409						
					H1112	H326					J0026D21[3]	J403						
Realtek	RTL8100C/101L/100B	1	Controller	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	RTL8139/B/C/CL		Controller	1:1	H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
	RTL8150	1	Controller	1:1	H1251	H600	H2009[2]	H327			JV006I21[4]	J409						
	RTL8201CL/8201BL	1	PHY	1:1	H1281	H600					J3006G21D[5]	J409						
	RTL8019AS	1	Controller	1:1	HX1188[1]	H325					J0C-0003 4	J409						
	RTL8181/86	1	Controller		H2019[2]	H327					J0026D01B[3]	J403						
	RTL8208	8	PHY		PE-69012[E]	H304					J1012F01C[3]	J402						
	RTK8308	8	Controller		H0019	H304					J3011G21D[5]	J409						
	RTL8309	9	Controller		H1112	H326					J1011F01P[3]	J402						
											J0011D21[3]	J403						
	RTL8208	8	PHY	1:1	H1102	H325	H1260	H600	H1164[2]	H328	J0006D21[3]	J403	J8064E64[6]	J404	J2045H3A[C]	J401	JW0-0009[C]	J408
	RTL8316	16	Controller	1:1	H1260	H600	H2005A[2]	H327	H1259	H600	J1006F21[3]	J402	J8064E68[6]	J404	J2045H3B[C]	J401	JY0-0016[D]	J408
							H2009[2]	H327	HX1234[1]	H328			J8064D648A[6]	J404	J2045H3C[C]	J401		
									H2017[2]	H327			J8064D688A[6]	J404				
SIS	SiS900	1	MAC/PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
					H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
					H1260	H600	H2009[2]	H327			JV006I21[4]	J409						
					H2019[2]	H327					J3006G21D[5]	J409						
					PE-69012[E]	H304					J0C-0003[4]	J409						
SMSC	LAN83C183/185	1	PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	LAN91C100FD/110	1	Controller	1:1	H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
	LAN91C96, LAN91C96I	1	Controller	1:1	HX1188[1]	H325	H2009[2]	H327			JV006I21[4]	J409						
	LAN91C111	1	PHY	1:1	H2019[2]	H327					J3006G21D[5]	J409						
					PE-69012[E]	H304					J0C-0003[4]	J409						
											J0026D21[3]	J403						
	LAN9115										J0011D21B	J403						

1. ***Extended*** *temperature single port discrete magnetic cross reference*
2. ***PoE / VoIP*** *single port discrete magnetic cross reference*
3. ***Single*** *port THT tab-up/down connector cross reference*
4. ***Single*** *port SMT tab-down connector cross reference*
5. ***Single*** *port SMT tab-up connector cross reference*
6. ***Multiport*** *1byN THT tab-down connector cross reference*
7. ***RJ45/USB*** *single port THT tab-up connector cross reference*

A. RX *turns ratio is 1:1, TX turns ratio is 1:1, unless otherwise specified.*

B. One *part is identified in this cross reference. Multiple parts with different platforms can be found on the referenced data sheet.*

C. Multiport *2byN THT connector cross reference (A=2x4, B=2x6, C=2x8)*

D. LED *colors (Green/Yellow, Green-Orange/Yellow)*

E. Low *profile (PCMCIA)*

NOTE: Most *Pulse products can be manufactured to comply with the RoHS (Restriction of Hazardous Substances) directive. These parts are identified by adding the suffix "NL" at the end of the part number.*

SMT - Surface Mount Package **THT** - Through Hole Package

LAN 10/100BASE-TX IC CROSS REFERENCE *(continued)*

Pulse® A TECHNITROL COMPANY

IC Manufacturer	IC Part Number	IC Ports	IC Note	Turns Ratio[A] TX	DISCRETE COMPONENTS: Single Part Number	Single Data Sheet	Dual Part Number	Dual Data Sheet	Quad Part Number	Quad Data Sheet	RJ45 & RJ45/USB PLATFORMS[B]: 1x1 Part Number	1x1 Data Sheet	1xN Part Number	1xN Data Sheet	2xN Part Number	2xN Data Sheet	RJ45/USB[7] Part Number	RJ45/USB[7] Data Sheet
Teridian (TDK)	78P2123	1	PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
	78Q2123	1	PHY	1:1	H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
					HX1188[1]	H325	H2009[2]	H327			JV006I21[4]	J409						
					H2019[2]	H327					J3006G21D[5]	J409						
					PE-69012[E]	H304					J0C-0003[4]	J409						
Texas Instruments	TPS2370/2375	1	MAC/PHY	1:1	H1102	H325	H1270	H322			J0006D21[3]	J403	J8064E62[6]	J404	J20 Series	J401	JW0-0009[D]	J408
					H1260	H600	H2005A[2]	H327			J1006F21[3]	J402	J8064D628A[6]	J404			JY0-0016[D]	J408
					HX1188[1]	H325	H2009[2]	H327			JV006I21[4]	J409						
					H2019[2]	H327					J3006G21D[5]	J409						
					PE-69012[E]	H304					J0C-0003[4]	J409						
Zarlink (Plessey/Mitel)	MT933	1	PHY	1:1	H1102	H325	H1270	H322	H1164[2]	H328	J0006D21[3]	J403	J8064E64[6]	J404	J2045H3A[C]	J401	JW0-0009[D]	J408
					H1260	H600	H2005A[2]	H327	H1259	H600	J1006F21[3]	J402	J8064E68[6]	J404	J2045H3B[C]	J401	JY0-0016[D]	J408
					HX1188[1]	H325	H2009[2]	H327	HX1234[1]	H328	JV006I21[4]	J409	J8064D648A[6]	J404	J2045H3C[C]	J401		
					H2019[2]	H327			H2017[2]	H327	J3006G21D[5]	J409	J8064D688A[6]	J404				
					PE-69012[E]	H304					J0C-0003[4]	J409						

1. ***Extended*** *temperature single port discrete magnetic cross reference*
2. ***PoE / VoIP*** *single port discrete magnetic cross reference*
3. ***Single*** *port THT tab-up/down connector cross reference*
4. ***Single*** *port SMT tab-down connector cross reference*
5. ***Single*** *port SMT tab-up connector cross reference*
6. ***Multiport*** *1byN THT tab-down connector cross reference*
7. ***RJ45/USB*** *single port THT tab-up connector cross reference*

A. ***RX*** *turns ratio is 1:1, TX turns ratio is 1:1, unless otherwise specified.*
B. ***One*** *part is identified in this cross reference. Multiple parts with different platforms can be found on the referenced data sheet.*
C. ***Multiport*** *2byN THT connector cross reference (A=2x4, B=2x6, C=2x8)*
D. ***LED*** *colors (Green/Yellow, Green-Orange/Yellow)*
E. ***Low*** *profile (PCMCIA)*

NOTE: Most *Pulse products can be manufactured to comply with the RoHS (Restriction of Hazardous Substances) directive. These parts are identified by adding the suffix "NL" at the end of the part number.*

SMT - Surface Mount Package **THT** - Through Hole Package

LAN 10BASE-T IC CROSS REFERENCE *(continued)*

DISCRETE COMPONENTS

IC Manufacturer	IC Part No.	Pulse Part No.	Ports Supported	Configuration [1]		Turns Ratio [2]		Package		Data Sheet
				TX	RX	TX	RX	Style [3]	L/W/H (in)*	
AMD	AM79C90, AM79C98,	FL1020	Single Port	R, F, T, C	R, F, T, C	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1020
	AM79C100, AM79C940,	E2003	Single Port	R, F, T, C	R, F, T, C	1CT:1	1CT:1	SMT	1.000 / .500 / .230	E115
	AM79C960, AM79C961,	J00-0025	Single	T, C	T, C	1CT:2.5	1CT:1	1x1 ICM	21.59 / 16.26 / 13.84 [4]	J414
	AM79C965, AM79C970,	PE-68017S	Single Port	F, T, C	F, T, C	1CT:1	1CT:1	SIL	1.000 / .210 / .450	E104
	AM79C971, AM79C981,	SF1012	Single Port	F, T, C	F, T, C	1:1	1:1	SMT	1.010 / .380 / .246	SF1012
	AM79C982, AM79C983,	PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
	AM79C961 (PC net-ISA II)	FL1012	Single Port	F, T, C	F, T	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1012
		PE-68068	Single Port	F, T, C	F, T	1CT:1	1CT:1	SMT	.600 / .650 / .084	E100
		PE-68056	Single Port	F, T, C	F, T	1CT:1	1CT:1	SMT	.930 / .510 / .230	E115
		PE-68032	Single Port	F, T, C	F, T	1CT:1	1CT:1	PCMCIA	.800 / .675 / .094	E103
	AM79C984, AM79C985,	ST4190T	Quad Port	T, C	T, C	1CT:1CT	1:1	SMT	1.112 / .625 / .230	ST4190T
	AM79C988, AM79C989	PE-68049L	Quad Port	T, C	T	1CT:1CT	1:1	SMT	1.125 / .640 / .230	EC101
		PE-68050L	Quad Port	T	T	1CT:1CT	1:1	SMT	1.125 / .640 / .230	EC101
		E5017	Single Port	T, C	T	1CT:1CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
	AM186CC15DN	E2003	Single Port	R, F, T, C	R, F, T, C	1CT:1	1CT:1	SMT	1.000 / .500 / .230	E115
		J00-0025	Single	T, C	T, C	1CT:2.5	1CT:1	1x1 ICM	21.59 / 16.26 / 13.84 [4]	J414
Cirrus Logic	CS8900, CS8920	PE-68062L	Quad Port	T, C	T	1CT:1.414CT	1:1	SMT	1.125 / .640 / .230	EC101
		PE-68065L	Quad Port	T	T	1CT:1.414CT	1:1	SMT	1.125 / .640 / .230	EC101
		23Z356SM	Single Port	T, C	T, C	1CT:1.414CT	1CT:1CT	SMT	.450 / .360 / .215	EC100
		ST7010T	Single Port	T, C	T, C	1CT:1.414CT	1CT:1CT	SMT	.457 / .375 / .230	ST7010T
		PE-65745	Single Port	T	T	1CT:1.414CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
		E2003	Single Port	R, F, T, C	R, F, T, C	1CT:1	1CT:1	SMT	1.000 / .500 / .230	E115
		J00-0025	Single	T, C	T, C	1CT:2.5	1CT:1	1x1 ICM	21.59 / 16.26 / 13.84 [4]	J414
	CS8900A-CQ3	E2023	Single Port	T, C	T, C	1CT:2.5CT	1CT:1CT	SMT	.500 / .375 / .230	EC100
		E4005	Single Port	T, C	T, C	1CT:2.5CT	1CT:1CT	SMT	.500 / .375 / .230	EC100
		J00-0025	Single	T, C	T, C	1CT:2.5	1CT:1	1x1 ICM	21.59 / 16.26 / 13.84 [4]	J414
	CS8900A-RQ3	EX2024	Single Port	T, C	T, C	1CT:2.5CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
Davicom	DM9008	FL1020	Single Port	R, F, T, C	R, F, T, C	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1020
	DM9009	PE-68017S	Single Port	F, T, C	F, T, C	1CT:1	1CT:1	SIL	1.000 / .210 / .450	E104
	DM9081	SF1012	Single Port	F, T, C	F, T, C	1:1	1:1	SMT	1.010 / .380 / .246	SF1012
	DM9095	PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
		FL1012	Single Port	F, T, C	F, T	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1012
		PE-68056	Single Port	F, T, C	F, T	1CT:1	1CT:1	SMT	.930 / .510 / .230	E115
		PE-68032	Single Port	F, T, C	F, T	1CT:1	1CT:1	PCMCIA	.800 / .675 / .094	E103
Fujitsu	MB86967	PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
		PE-68032	Single Port	F, T, C	F, T	1CT:1	1CT:1	PCMCIA	.800 / .675 / .094	E103
		PE-68030	Single Port	F, T, C	F, T	1CT:1	1CT:1	PCMCIA	.800 / .675 / .094	E103
	MB86951, MB86961,	23Z356SM	Single Port	T, C	T, C	1CT:1.414CT	1CT:1CT	SMT	.450 / .360 / .215	EC100
	MB86964, MB86965B	PE-68048	Single Port	T, C	T	1CT:1.414CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
		PE-65745	Single Port	T	T	1CT:1.414CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
Intel (Level One)	LXT901A, LXT907A	23Z356SM	Single Port	T, C	T, C	1CT:1.414CT	1CT:1CT	SMT	.450 / .360 / .215	EC100
		PE-68048	Single Port	T, C	T	1CT:1.414CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
		PE-65745	Single Port	T	T	1CT:1.414CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
	LXT905, LXT908	23Z467SM	Single Port	T, C	T, C	1CT:2CT	1CT:1CT	SMT	.450 / .360 / .215	EC100
		ST4202T	Single Port	T, C	T, C	1CT:2CT	1CT:1CT	SMT	.477 / .360 / .223	ST4202T
	LXT902	FL1020	Single Port	R, F, T, C	R, F, T, C	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1020
		PE-68017S	Single Port	F, T, C	F, T, C	1CT:1	1CT:1	SIL	1.000 / .210 / .450	E104
		SF1012	Single Port	F, T, C	F, T, C	1:1	1:1	SMT	1.010 / .380 / .246	SF1012
		PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
		FL1012	Single Port	F, T, C	F, T	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1012
		PE-68056	Single Port	F, T, C	F, T	1CT:1	1CT:1	SMT	.930 / .510 / .230	E115
		PE-68032	Single Port	F, T, C	F, T	1CT:1	1CT:1	PCMCIA	.800 / .675 / .094	E103
	LXT914, LXT915,	PE-68062L	Quad Port	T, C	T	1CT:1.414CT	1:1	SMT	1.125 / .640 / .230	EC101
	LXT916, LXT917,	PE-68065L	Quad Port	T	T	1CT:1.414CT	1:1	SMT	1.125 / .640 / .230	EC101
	LXT918, LXT944	PE-68810	Quad Port	T	—	—	1:1 (4X)	SMT	.500 / .370 / .200	EC100
		PE-68820	Quad Port	T	—	1:1.414 (4X)	—	SMT	.500 / .370 / .200	EC100

1. Configuration: ***T*** *= Transformer,* ***F*** *= Low Pass Filter,* ***C*** *= Choke,* ***R*** *= Pre-distortion Resistors*

(continued on next page)

2. Turns Ratio *is referenced chip side to media side.*

3. Package Styles: DIL *(Dual-In-Line Package),* ***SIL*** *(Single-In-Line Package),* ***SMT*** *(Surface Mount Package),* ***PCMCIA*** *(Ultra Low Profile–SMT)*

4. Millimeters

NOTE: ICs are in groups. Each group works with all adjacent Pulse parts.

***L/W/H** is measured on surface mount parts tip to tip (height includes wash area).

LAN 10BASE-T IC CROSS REFERENCE *(continued)*

Pulse® A TECHNITROL COMPANY

DISCRETE COMPONENTS

IC Manufacturer	IC Part No.	Pulse Part No.	Ports Supported	Configuration [1]		Turns Ratio [2]		Package		Data Sheet
				TX	RX	TX	RX	Style [3]	L/W/H (in)*	
LSI	L64381	FL1020	Single Port	R, F, T, C	R, F, T, C	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1020
	80C24	E2004	Single Port	R, F, T, C	R, F, T	1CT:1	1CT:1	SMT	1.000 / .500 / .230	E115
		PE-68017S	Single Port	F, T, C	F, T, C	1CT:1	1CT:1	SIL	1.000 / .210 / .450	E104
		SF1012	Single Port	F, T, C	F, T, C	1:1	1:1	SMT	1.010 / .380 / .246	SF1012
		PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
		FL1012	Single Port	F, T, C	F, T	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1012
		PE-68056	Single Port	F, T, C	F, T	1CT:1	1CT:1	SMT	.930 / .510 / .230	E115
		PE-68032	Single Port	F, T, C	F, T	1CT:1	1CT:1	PCMCIA	.800 / .675 / .094	E103
Lucent	T7213, T7241A	FL1020	Single Port	R, F, T, C	R, F, T, C	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1020
		PE-68017S	Single Port	F, T, C	F, T, C	1CT:1	1CT:1	SIL	1.000 / .210 / .450	E104
		SF1012	Single Port	F, T, C	F, T, C	1:1	1:1	SMT	1.010 / .380 / .246	SF1012
		PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
		FL1012	Single Port	F, T, C	F, T	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1012
		PE-68056	Single Port	F, T, C	F, T	1CT:1	1CT:1	SMT	.930 / .510 / .230	E115
		PE-68032	Single Port	F, T, C	F, T	1CT:1	1CT:1	PCMCIA	.800 / .675 / .094	E103
MicroLinear	ML2652, ML2653, ML4652, ML4658	23Z435	Single Port	T	T	2CT:1CT	1CT:1CT	DIL	.800 / .340 / .250	EC100
		23Z435SM	Single Port	T	T	2CT:1CT	1CT:1CT	SMT	.450 / .360 / .215	EC100
		PE-68052	Single Port	T, C	T	2CT:1CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
Motorola	MC68160	FL1020	Single Port	R, F, T, C	R, F, T, C	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1020
		E2007	Single Port	R, F, T, C	R, F, T	1CT:1	1CT:1	SMT	1.000 / .500 / .230	E115
		PE-68017S	Single Port	F, T, C	F, T, C	1CT:1	1CT:1	SIL	1.000 / .210 / .450	E104
		SF1012	Single Port	F, T, C	F, T, C	1:1	1:1	SMT	1.010 / .380 / .246	SF1012
		PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
		FL1012	Single Port	F, T, C	F, T	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1012
		PE-68056	Single Port	F, T, C	F, T	1CT:1	1CT:1	SMT	.930 / .510 / .230	E115
		PE-68032	Single Port	F, T, C	F, T	1CT:1	1CT:1	PCMCIA	.800 / .675 / .094	E103
National Semiconductor	DP83901A DP83902A, DP83902 DP83905, DP83934	FL1020	Single Port	R, F, T, C	R, F, T, C	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1020
		E2001	Single Port	R, F, T, C	R, F, T	1CT:1	1CT:1	SMT	1.000 / .500 / .230	E115
		PE-68017S	Single Port	F, T, C	F, T, C	1CT:1	1CT:1	SIL	1.000 / .210 / .450	E104
		SF1012	Single Port	F, T, C	F, T, C	1:1	1:1	SMT	1.010 / .380 / .246	SF1012
		PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
		FL1012	Single Port	F, T, C	F, T	1CT:1CT	1CT:1CT	DIL	1.000 / .400 / .338	FL1012
		PE-68056	Single Port	F, T, C	F, T	1CT:1	1CT:1	SMT	.930 / .510 / .230	E115
		PE-68032	Single Port	F, T, C	F, T	1CT:1	1CT:1	PCMCIA	.800 / .675 / .094	E103
	DP83907, DP83924A	E5002	Quad Port	T, C	T, C	1CT:2CT	1:1	SMT	1.125 / .640 / .230	E116
		23Z467SM	Single Port	T, C	T, C	1CT:2CT	1CT:1CT	SMT	.450 / .360 / .215	EC100
		ST4202T	Single Port	T, C	T, C	1CT:2CT	1CT:1CT	SMT	.447 / .360 / .223	ST4202T
Realtek	RTL8301	PE-68049L	Quad Port	T, C	T	1CT:1CT	1:1	SMT	1.125 / .640 / .230	EC101
	RTL8019AS	PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
	RTL8029AS	PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
	RTL8301	PE-68049L	Quad Port	T, C	T	1CT:1CT	1:1	SMT	1.125 / .640 / .230	EC101
SMSC	LAN91C46	PE-68026	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
	LAN91C91	EX2001	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930/.510/.230	E112
	LAN91C96	PE-68056	Single Port	F, T, C	F, T	1CT:1CT	1CT:1CT	SMT	.930 / .510 / .230	E115
		EX2001	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930/.510/.230	E112
		E2009	Single Port	F, T, C	F, T	1CT:1.414	1CT:1	SMT	1.000 / .500 / .230	E115
	LAN91C111	EX2001	Single Port	F, T, C	F, T, C	1CT:1CT	1CT:1CT	SMT	.930/.510/.230	E112
Texas Instruments	TNETE100A	23Z356SM	Single Port	T, C	T, C	1CT:1.414CT	1CT:1CT	SMT	.450 / .360 / .215	EC100
		PE-65745	Single Port	T	T	1CT:1.414CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
		PE-68048	Single Port	T, C	T	1CT:1.414CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
	TNETE2004	PE-68062L	Quad Port	T, C	T	1CT:1.414CT	1:1	SMT	1.125 / .640 / .230	EC101
		PE-68065L	Quad Port	T	T	1CT:1.414CT	1:1	SMT	1.125 / .640 / .230	EC101
		23Z356SM	Single Port	T, C	T, C	1CT:1.414CT	1CT:1CT	SMT	.450 / .360 / .215	EC100
		PE-65745	Single Port	T	T	1CT:1.414CT	1CT:1CT	SMT	.500 / .370 / .200	EC100
		PE-68048	Single Port	T, C	T	1CT:1.414CT	1CT:1CT	SMT	.500 / .370 /.200	EC100
	TNETE2008	PE-68049L	Quad Port	T, C	T	1CT:1CT	1:1	SMT	1.125 / .640 / .230	EC101
		E5008	Quad Port	T, C	T	1CT:1CT	1:1	SMT	1.125 / .640 / .230	E117

1. ***Configuration:*** ***T*** *= Transformer,* ***F*** *= Low Pass Filter,* ***C*** *= Choke,* ***R*** *= Pre-distortion Resistors*
2. ***Turns Ratio*** *is referenced chip side to media side.*
3. ***Package Styles: DIL*** *(Dual-In-Line Package),* ***SIL*** *(Single-In-Line Package),* ***SMT*** *(Surface Mount Package),* ***PCMCIA*** *(Ultra Low Profile–SMT)*

NOTE: ICs are in groups. Each group works with all adjacent Pulse parts.

***L/W/H** is measured on surface mount parts tip to tip (height includes wash area).

LAN ATM IC CROSS REFERENCE

ATM NETWORK COMPONENTS

Speed	IC Manufacturer/ IC Part Number	Pulse Part No.	Ports Supported	Configuration [1]		Turns Ratio [2]		Package		Data Sheet
				TX	RX	TX	RX	Style [3]	L/W/H (in)*	
155 ATM	**National** / 83223	PE-68517L	Single Port	C, T, C, S	C, T	1CT:1CT	1CT:1CT	SMT	1.000 / .510 / .370	H303
	MicroLinear / ML6674	PE-68515L	Single Port	T, C, S	C, T	1CT:1CT	1CT:1CT	SMT	1.000 / .510 / .370	H303
	PMC Sierra / PM5350	H1019	Single Port	C, T, C, S	C, T	1CT:1CT	1CT:1CT	SMT	1.000 / .510 / .230	H303
		H1012	Single Port	T, C, S	C, T	1CT:1CT	1CT:1CT	SMT	1.000 / .510 / .230	H303
		H1027	Dual Port	C, T, C, S	C, T	1CT:1CT	1CT:1CT	SMT	1.125 / .640 / .230	H322
		H1028	Dual Port	T, C, S	C, T	1CT:1CT	1CT:1CT	SMT	1.125 / .640 / .230	H322
		H1049	Dual Port	T, C, S	C, T	1CT:1CT	1CT:1CT	SMT	1.125 / .640 / .230	H322
		H1036L	Quad Port	T, C	C, T	1CT:1	1CT:1CT	SMT	1.125 / .640 / .230	H316
		H1044	Quad Port	T, C	C, T	1CT:1	1CT:1CT	SMT	1.125 / .640 / .230	H316

1. ***Configuration:*** ***T*** *= Transformer,* ***C*** *= Choke,* ***S*** *= Shunt Inductor*
2. ***Turns Ratio*** *is referenced chip side to media side.*
3. ***Package Style:*** ***SMT****– Surface Mount Package*

NOTE: ICs are in groups. Each group works with all adjacent Pulse parts.

***L/W/H** is measured on surface mount parts tip to tip (height includes wash area).