

HIGH SPEED LAN MAGNETICS

FOR BROADCOM TRANSCEIVER CHIPSETS

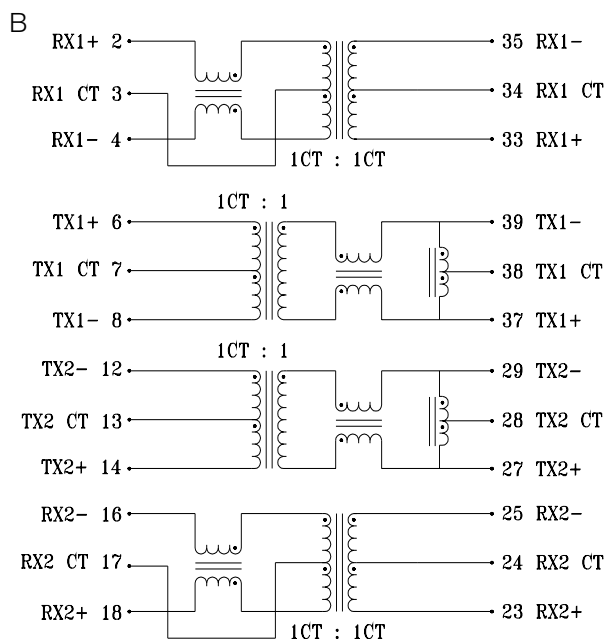
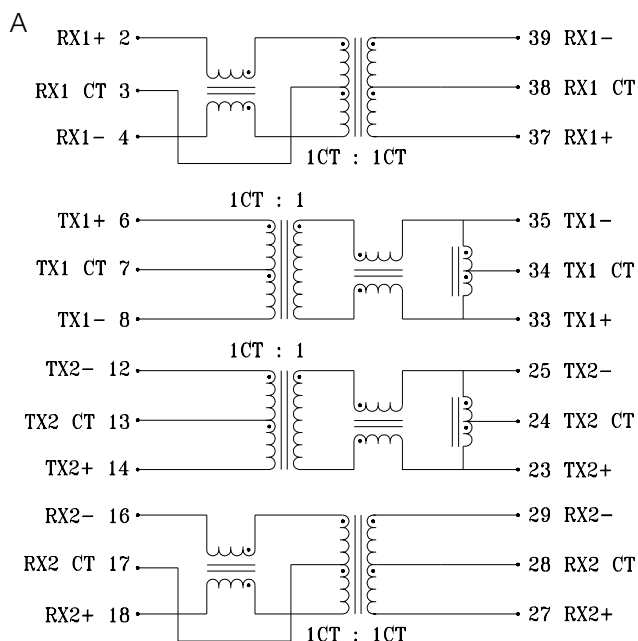
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- Designed for use with Broadcom BCM 5208 10/100 Mbps PHY transceiver
- Family of parts designed in common package providing multiple design options, including internal crossovers to reduce pcb layers and improve performance
- Dual, 2-port and quad, 4-port designs offer best space, performance and cost options
- 2000 Vrms isolation
- Low profile, surface mount packaging rated to withstand 225°C peak IR reflow temperature

ELECTRICALS AT 25°C

Part No.	Insertion Loss (dB) Typ		Return Loss (dB) Min		Crosstalk (dB) Min	Common to Diff Mode Rej (dB) Min		Common to Common Mode Rej (dB) Min		Schematic
	1MHz-125MHz	1MHz-30MHz	30MHz-60MHz	60MHz-80MHz		30MHz	100MHz	30MHz	100MHz	
S558-5999-47	-1.0	-16	16-20log(f/30MHz)	-10	-35	-50	-40	-40	-30	E
S558-5999-A3	-1.0	-16	16-20log(f/30MHz)	-10	-35	-50	-40	-40	-30	F
S558-5999-A4	-1.0	-16	16-20log(f/30MHz)	-10	-35	-50	-40	-40	-30	A
S558-5999-A5	-1.0	-16	16-20log(f/30MHz)	-10	-35	-50	-40	-40	-30	G
S558-5999-A6	-1.0	-16	16-20log(f/30MHz)	-10	-35	-50	-40	-40	-30	B
S558-5999-A7	-1.0	-16	16-20log(f/30MHz)	-10	-35	-50	-40	-40	-30	H
S558-5999-A8	-1.0	-16	16-20log(f/30MHz)	-10	-35	-50	-40	-40	-30	C
S558-5999-A9	-1.0	-16	16-20log(f/30MHz)	-10	-35	-50	-40	-40	-30	D

SCHEMATICS

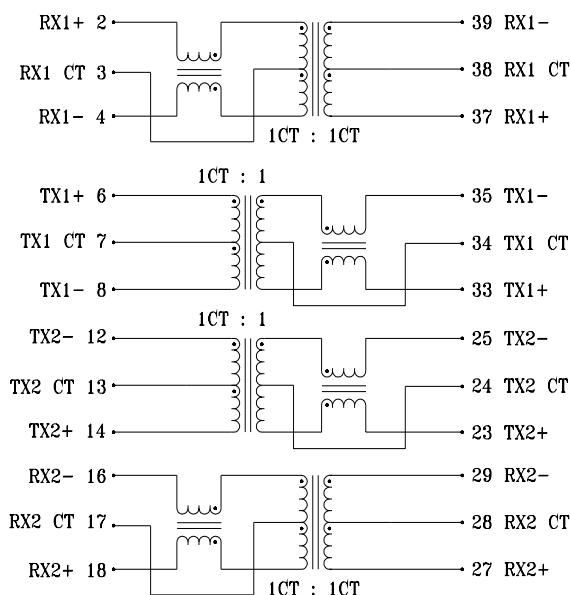


Specifications subject to change without notice.

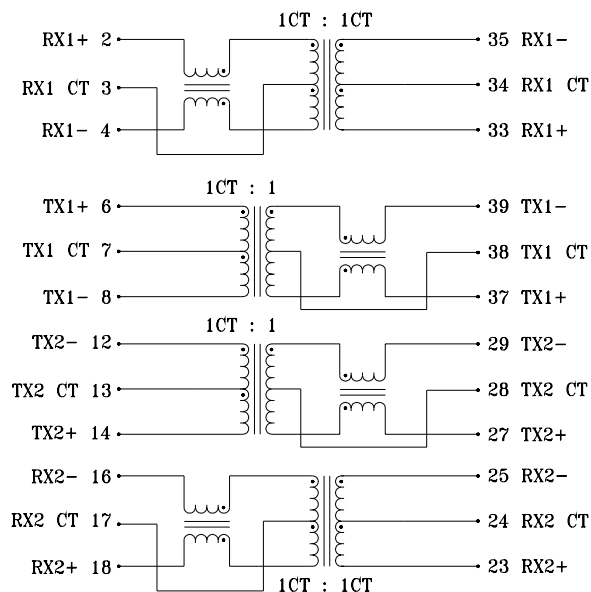
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SCHEMATICS (CONT'D)

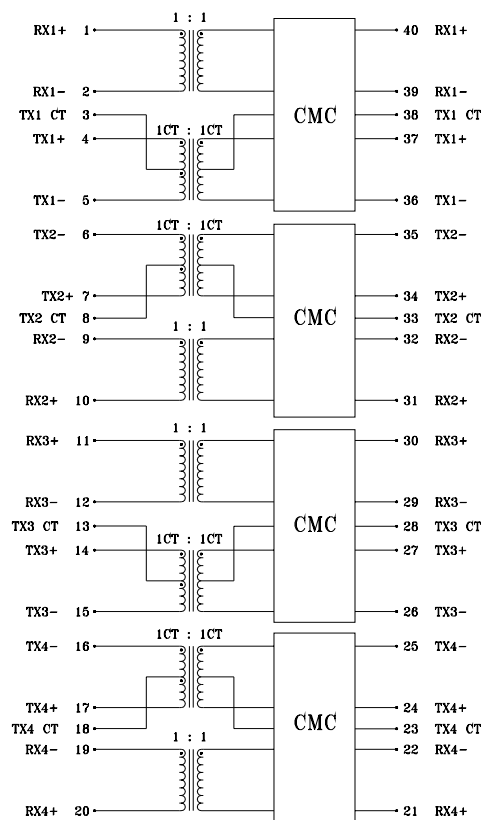
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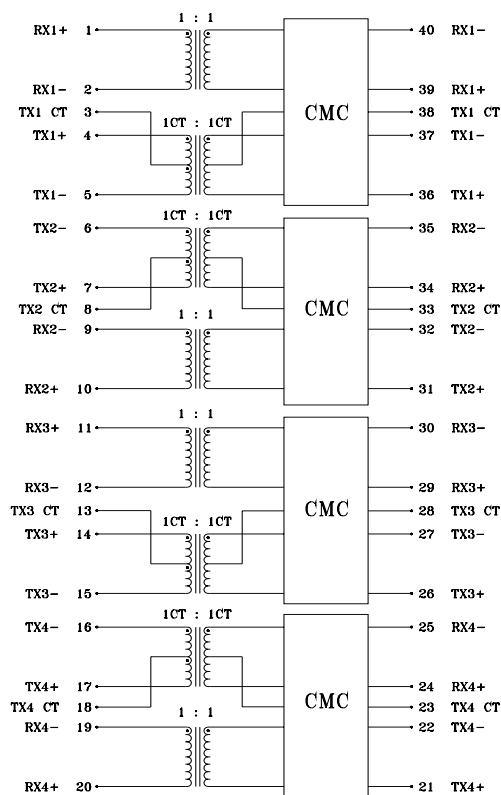
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E



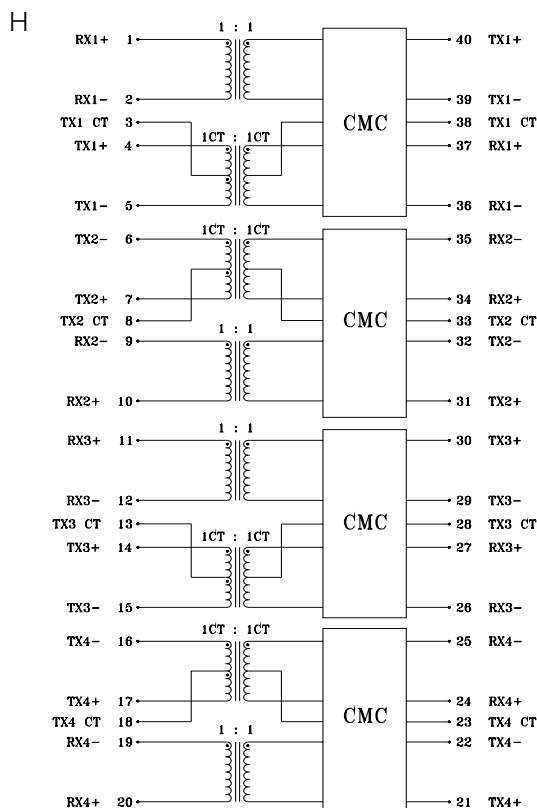
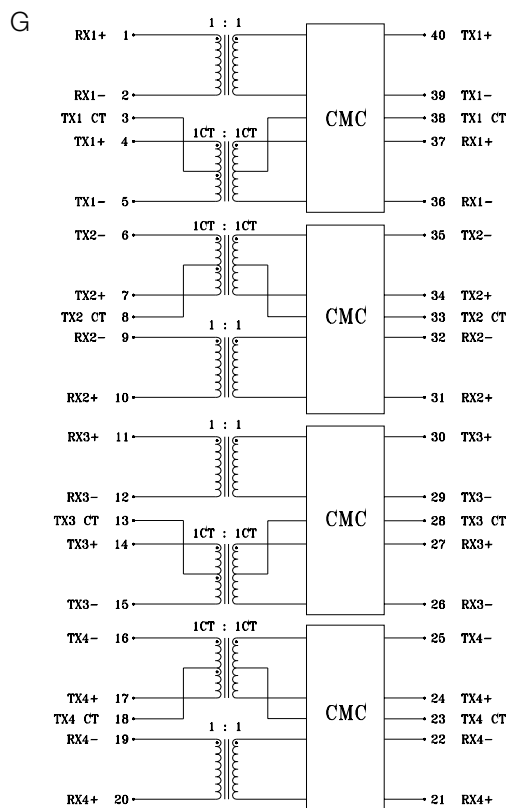
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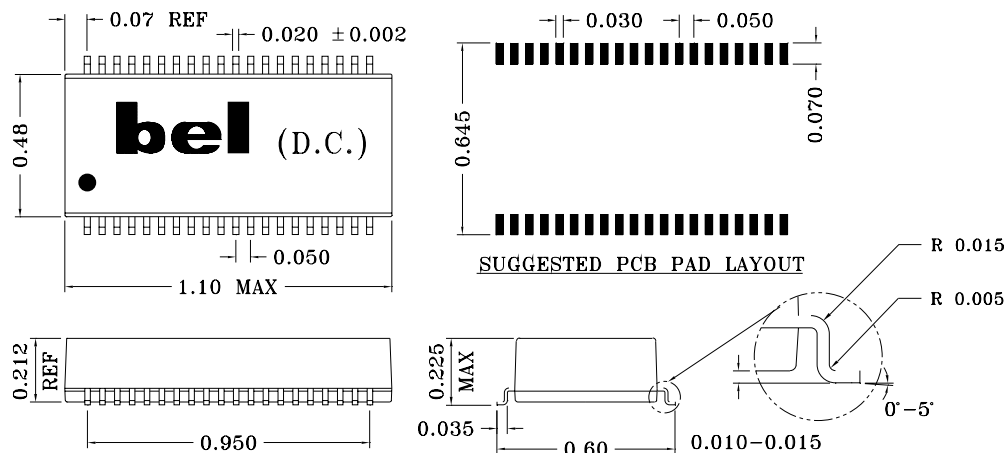
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SCHEMATICS (CONT'D)



MECHANICAL



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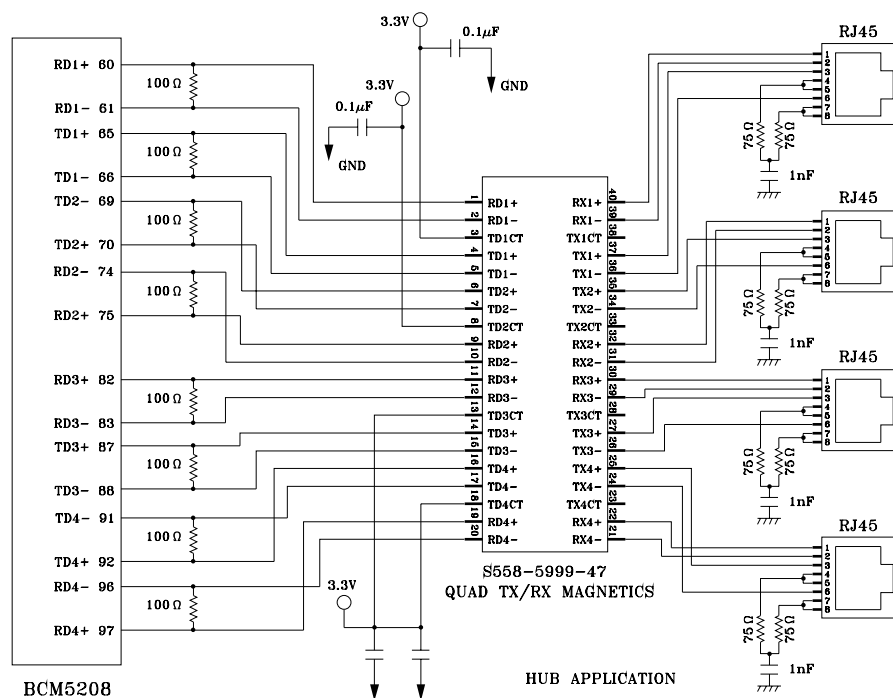


defining a degree of excellence

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APPLICATION CIRCUIT



APPLICATION NOTES

- The Broadcom BCM 5208 is optimized for use in repeater and switch applications. The Bel parts listed on this data sheet provide a very cost efficient interface, in addition to improving performance, reducing PCB layers and minimizing board space. These Bel parts will require minimal or no trace crossovers which should reduce PCB layers and allow for straight and short line traces from the transceiver and to the connectors.
- S558-5999-47 is a quad, 4-port device optimized to provide a straight line connection with stackable RJ-45 connectors.
- S558-5999-A3 and A5 are quad, 4-port devices optimized to provide a straight line connection with single in-line connectors.
- S558-5999-A7 is a quad, 4-port device optimized to provide a straight line connection with reversed pinout stackable RJ-45 connectors.
- S558-5999-A4 and A6 are dual, 2-port devices optimized for use with single in-line connectors and also includes an impedance matched common mode termination.
- S558-5999-A8 and A9 are dual, 2-port devices optimized for use with single in-line connectors.
- Bel's low profile, surface mount packaging is ideal for high speed pick and place machinery. Parts can be shipped on tape and reel for high speed placement. Construction processes have been implemented for thermal compatibility with high temperature IR reflow assembly processing. Post dipping of leads assist with PC board solderability. Each part is optically inspected to meet rigid coplanarity requirements.

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