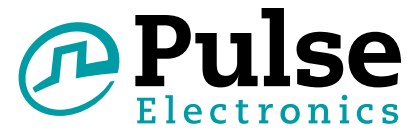


Copperhead Series

LVC MOS 30 Mb Transceiver

Line Interface Module



- Low profile package incorporating active transmitter and receiver
- Operating Temperature -40°C to +85°C
- Storage Temperature -55°C to +125°C
- LVC MOS input and output interface
- Differential signal on 60Ω STP cable for 16 Meter transmission and high noise immunity
- ESD Withstanding voltage – Human Body Model > 2.0KV
- θJC - 60°C/W

Part Number: TM030FUB7

Electrical Characteristics		Electrical Specification @ 25°C - Operating Temperature -40°C to +85°C			
Receiver		Vcc = 3.00V to 3.60VDC			
Parameter	SYM	MIN	Typical	MAX	UNIT
Output High Voltage (IOH = -3 mA)	VOH	2.4			V
Output Low Voltage (IOL = 24 mA)	VOL			0.5	V
Data Rate	DR	30		50	Mb/s
Power Supply Current	ICCR			26	mA
Output Short Circuit Current	Ios	-130		-80	mA
Input Voltage Swing (Differential P-P)	VPP	150	800	1200	mV
Total Pick-Pick Jitter*	DJ		4.0	5.0	nSec

*Rx Jitter DJ measured at the old output of 52' Segment with three 60Ω cable driven in parallel at TX out.

Electrical Characteristics		Electrical Specification @ 25°C - Operating Temperature -40°C to +85°C			
Transmitter		Vcc = 4.50V to 5.5VDC			
Parameter	SYM	MIN	TYPICAL	MAX	UNIT
Power Supply Current	ICCT			150	mA
Input High Current (VIN = VCC)	IHH			100	uA
Input Low Current (VIN = 0.5V)	IIL			-0.6	mA
Clamp Voltage (IIN = -18mA)	VIK			-1.0	V
Input High Voltage	VIH	2.0			V
Input Low Voltage	VIL		0.8		V
Output Voltage (Differential P-P)*	VOtx	2130	2850	3560	mV
Operating Data Rate	DR	30		50	Mb/s
Total Pick-Pick Jitter*	DJ		1.0	2.0	nSec

*Output voltage VPP into 60Ω load

NOTE: All units tested at 25°C / Guaranteed at -40°C to 85°C into 60Ω load

- Lead Finish - Sn63/Pb37
- Lead Material - Alloy 42
- Moisture Sensitivity Level (MSL = 3)
- Maximum Reflow Temperature 225°C
- Maximum Time Above 183°C < 90 seconds

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Copperhead Series

LVC MOS 30 Mb Transceiver

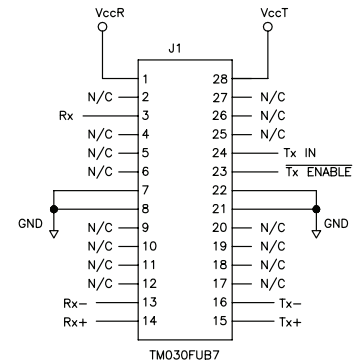
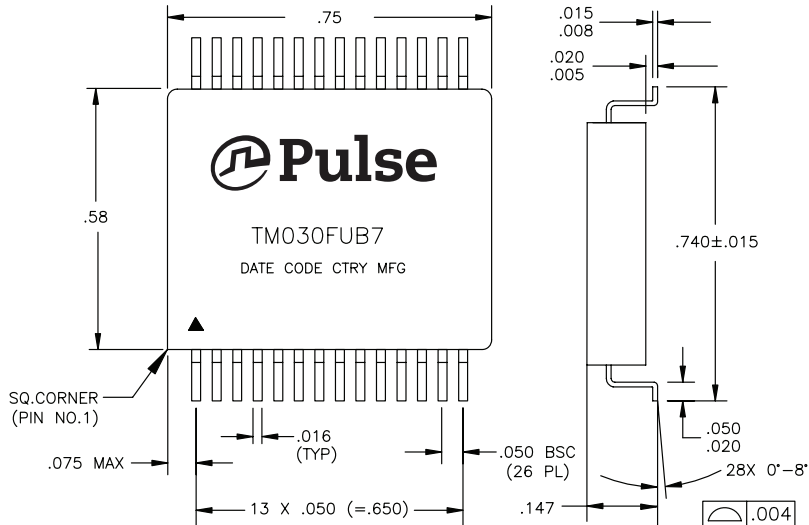
Line Interface Module



Mechanical

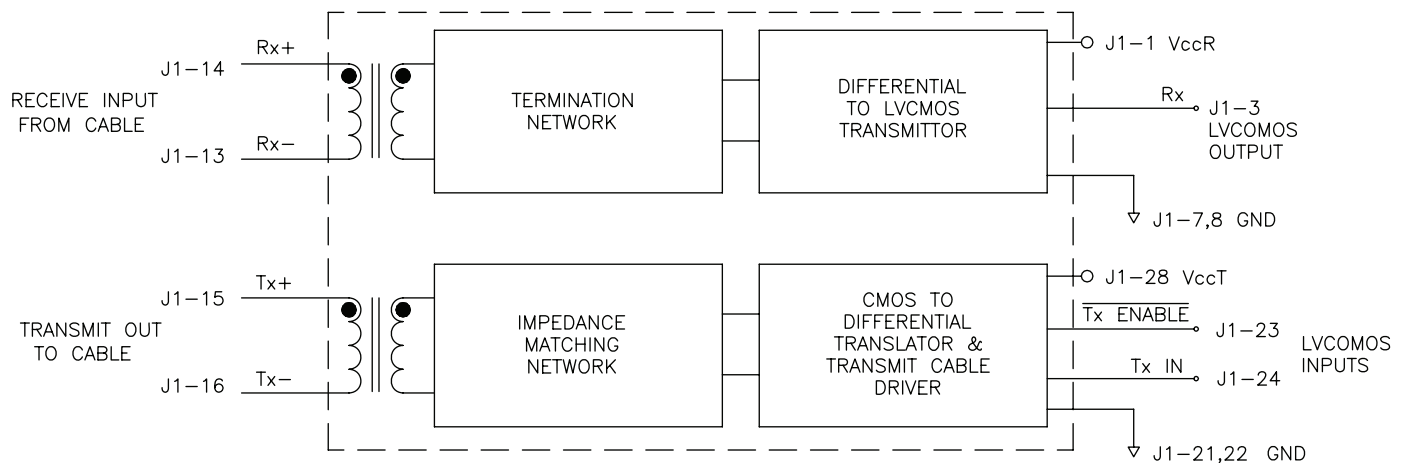
Pin Out

TM030FUB7



Schematic

TM030FUB7



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