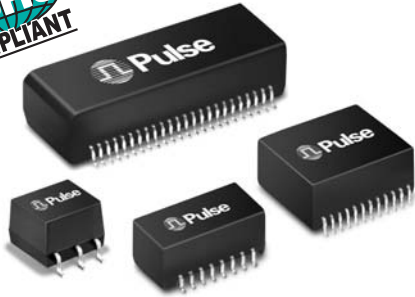


POWER OVER ETHERNET (PoE) MAGNETICS

10/100BASE-TX VoIP Magnetics Modules



- For RoHS part add suffix **NL²**
- Peak solder temperature rating per Table 5-2 in IPC/JEDEC J-STD-020C
- IEEE 802.3af/ANSI X3.263 compliant performance
- Designed for IP phone or switch applications

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

| Part Number | RoHS ² | Ports | Insertion Loss (dB MAX) | | | | Return Loss (dB MIN @ 100 Ω) | | | | Differential to Common Mode Rejection (dB MIN) | | | Crosstalk (dB MIN) | | | Hipot (Vrms MIN) | DC Resistance Balance ≤ (%) |
|---------------------|-------------------|-------|-------------------------|----------|--------|--------|------------------------------|--------|--------|---------|--|--------|---------|--------------------|-----|--|------------------|-----------------------------|
| | | | 1-100 MHz | 1-30 MHz | 40 MHz | 50 MHz | 60-80 MHz | 30 MHz | 60 MHz | 100 MHz | 30 MHz | 60 MHz | 100 MHz | | | | | |
| H1180 | NL ^{4c} | 1 | -1.2 | -16 | -14 | -13 | -12 | -43 | -37 | -33 | -45 | -40 | -35 | 1500 | — | | | |
| H1187 | NL ^{4c} | 1 | -1.2 | -16 | -14 | -13 | -12 | -43 | -37 | -33 | -45 | -40 | -35 | 1500 | — | | | |
| H1197 | 3, 4c | 1 | -1.2 | -16 | -14 | -13 | -12 | -43 | -37 | -33 | -45 | -40 | -35 | 1500 | — | | | |
| H2019 | NL ^{4c} | 1 | -1.2 | -16 | -14 | -13 | -12 | -43 | -37 | -33 | -45 | -40 | -35 | 1500 | 3.5 | | | |
| H2005A | NL ^{4d} | 2 | -1.2 | -16 | -14 | -13 | -12 | -50 | -43 | -35 | -43 | -37 | -33 | 1500 | 3.5 | | | |
| H2006A | NL ^{4d} | 2 | -1.2 | -16 | -14 | -13 | -12 | -43 | -37 | -33 | -43 | -37 | -31 | 1500 | 3.5 | | | |
| H2008 | NL ^{4d} | 2 | -1.2 | -16 | -14 | -13 | -12 | -40 | -35 | -30 | -43 | -37 | -33 | 1500 | 3.5 | | | |
| H2009 | NL ^{4c} | 2 | -1.1 | -16 | -14 | -13 | -12 | -43 | -37 | -33 | -43 | -37 | -33 | 1500 | 3.5 | | | |
| H2014 | 3, 4c | 4 | -1.2 | -16 | -14 | -13 | -12 | -43 | -37 | -33 | -45 | -40 | -35 | 1500 | 3.5 | | | |
| H2017 | 3, 4c | 4 | -1.2 | -16 | -14 | -13 | -12 | -43 | -37 | -33 | -45 | -40 | -35 | 1800 | 3.5 | | | |
| HX2019 ¹ | NL ^{4a} | 1 | -1.4 | -16 | -14 | -13 | -12 | — | — | — | -45 | -40 | -35 | 1500 | 3.5 | | | |

1. Extended temperature (-40°C to +85°C)
2. Add suffix **NL** for RoHS compliant parts, e.g. H1180 changes to H1180NL
3. Contact Pulse for RoHS compliant part availability
4. MSL=Moisture Sensitivity Level a=1 b=2 c=3 d=4 e=5

Mechanicals

H1180

Weight 0.6 grams
Tape & Reel500/reel
Tube65/tube

H1187

Weight 0.6 grams
Tape & Reel 500/reel
Tube 70/tube

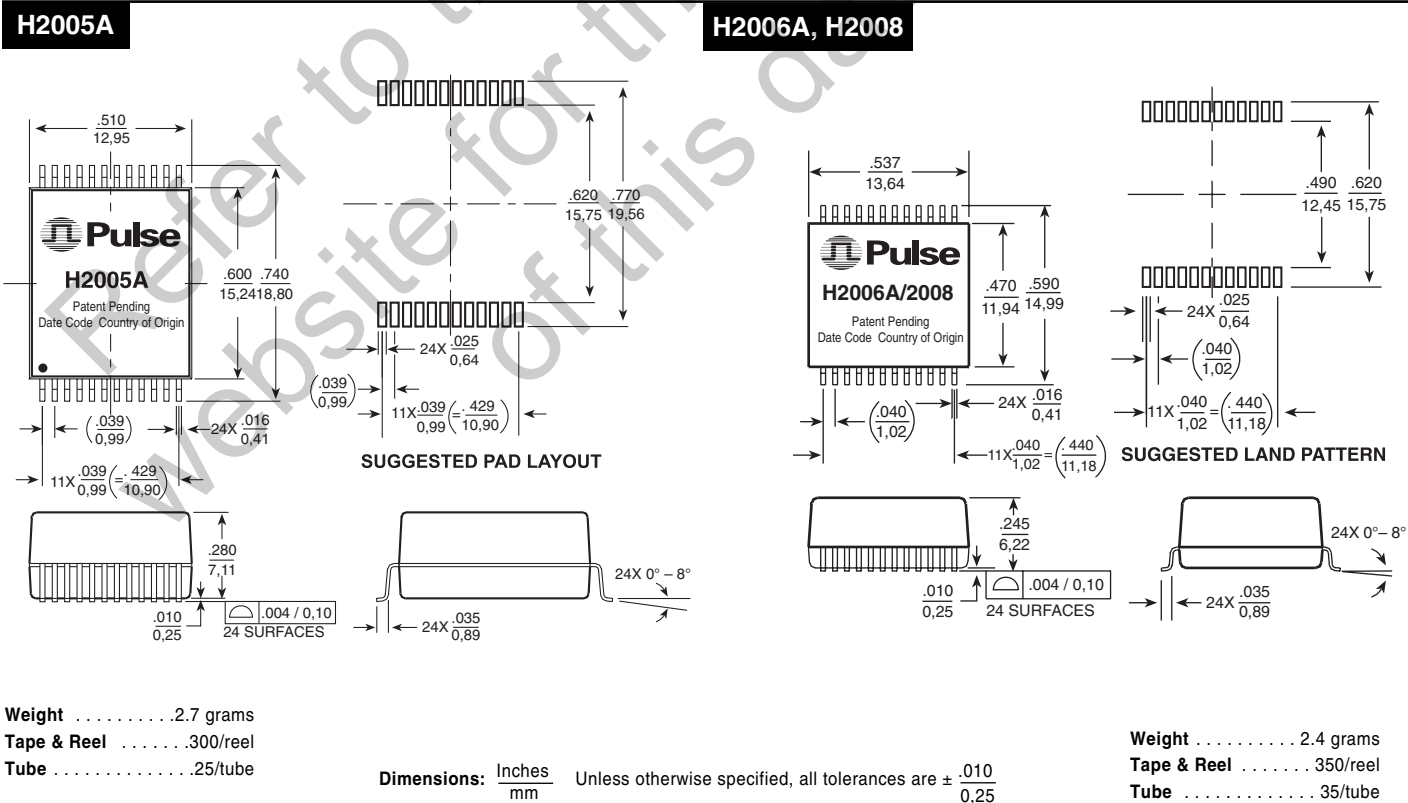
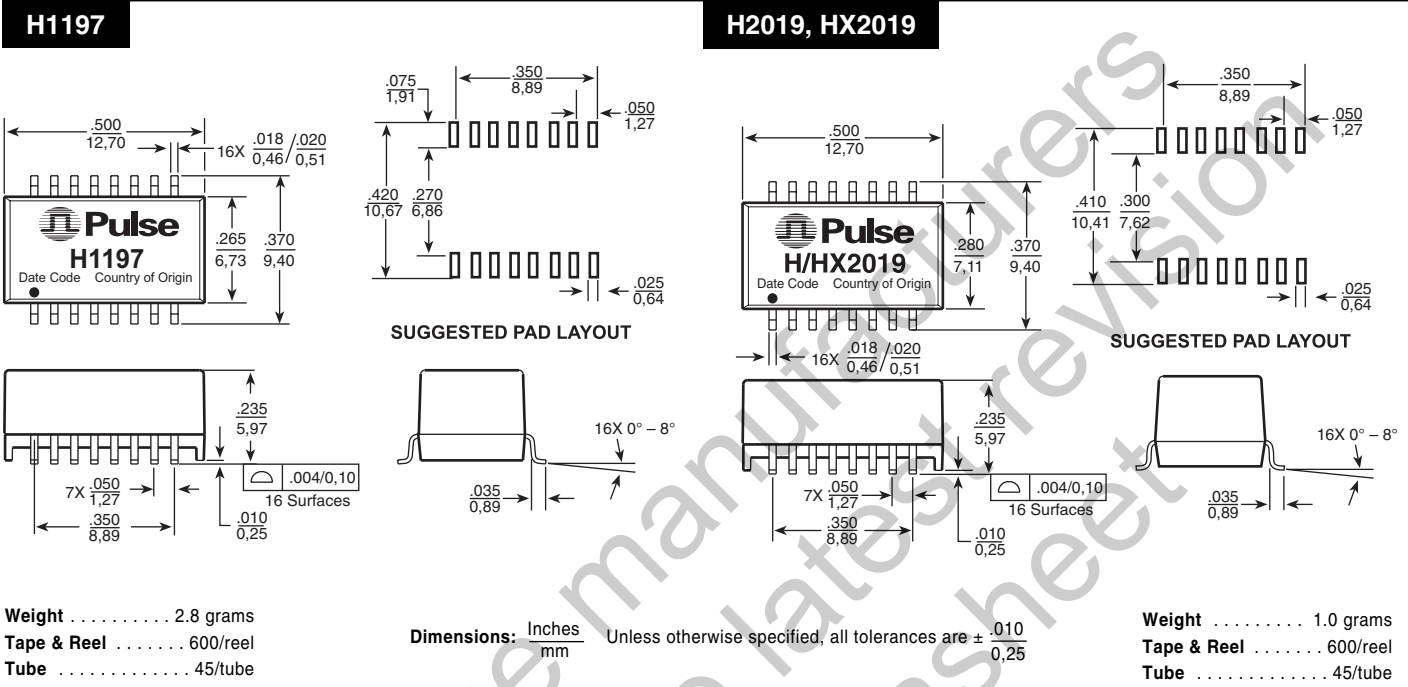
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

POWER OVER ETHERNET (PoE) MAGNETICS

10/100BASE-TX VoIP Magnetics Modules



Mechanicals



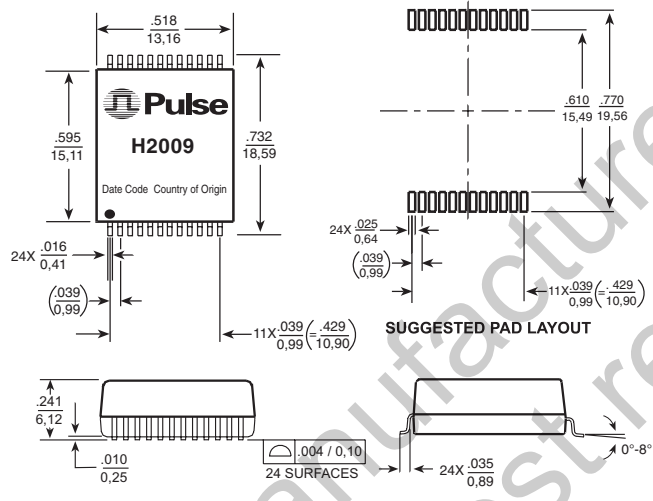
POWER OVER ETHERNET (PoE) MAGNETICS

10/100BASE-TX VoIP Magnetics Modules



Mechanicals (continued)

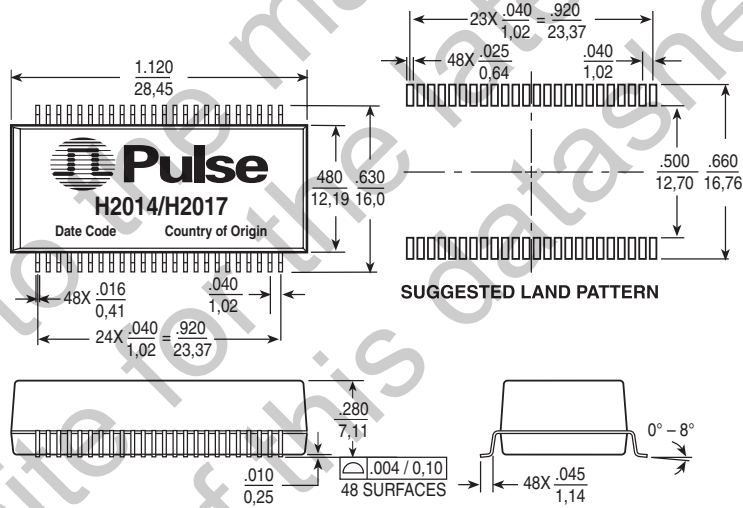
H2009



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

Weight 1.6 grams
Tape & Reel 300/reel
Tube 35/tube

H2014, H2017

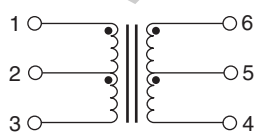


Dimensions: Inches
mm
Unless otherwise specified,
all tolerances are $\pm .010$
0.25

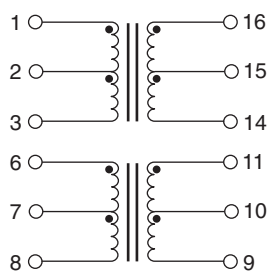
Weight 5.0 grams
Tape & Reel 250 /reel
Tube 15/tube

Schematics

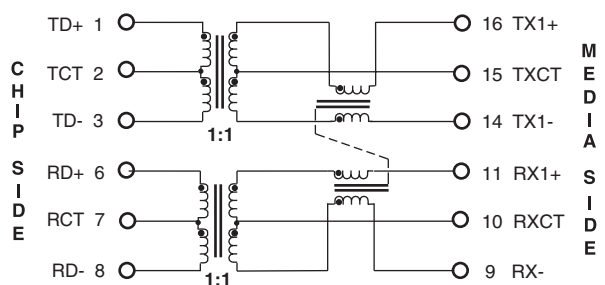
H1180, H1187



H1197



H2019, HX2019

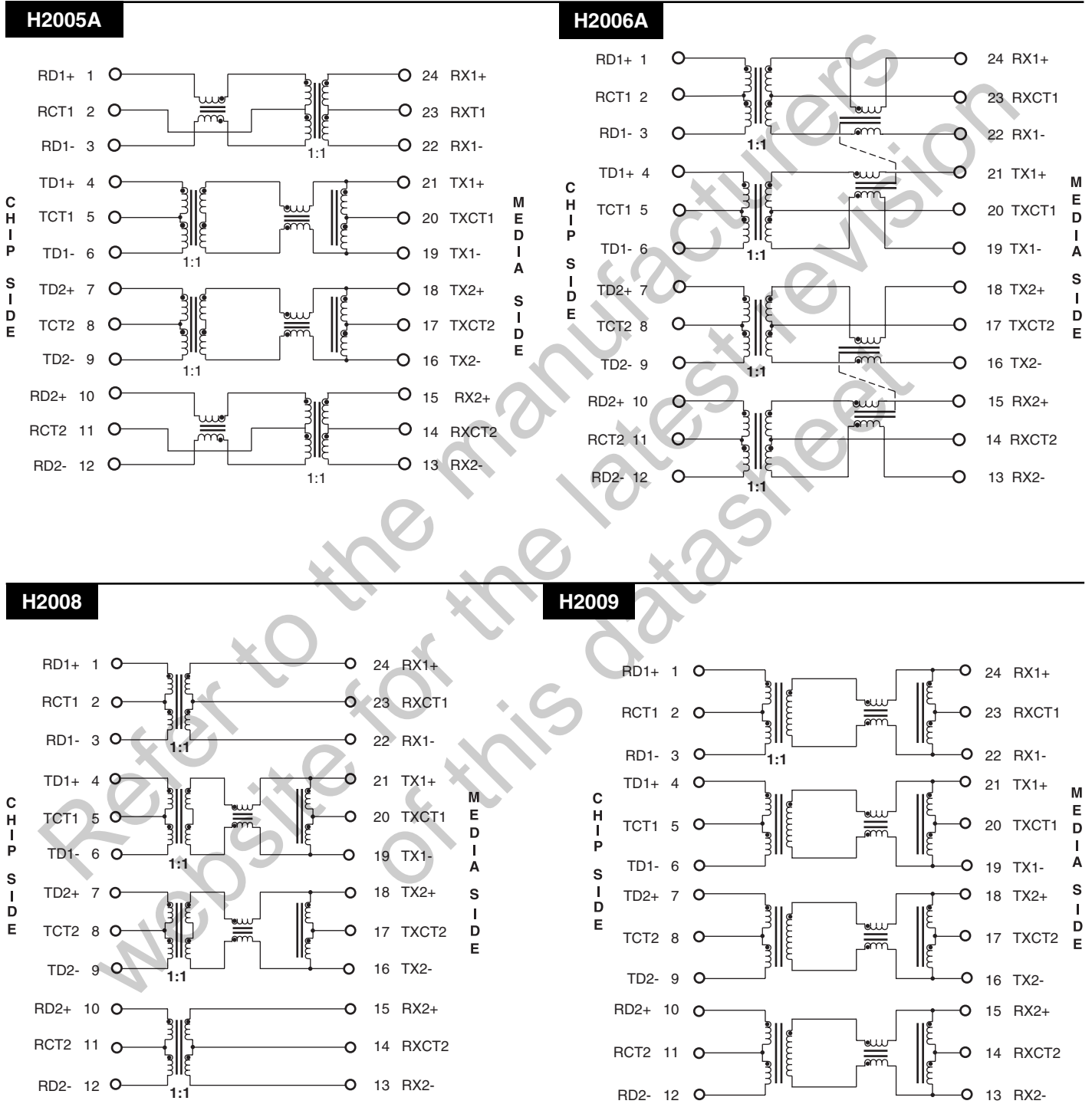


POWER OVER ETHERNET (PoE) MAGNETICS

10/100BASE-TX VoIP Magnetics Modules



Schematics (continued)



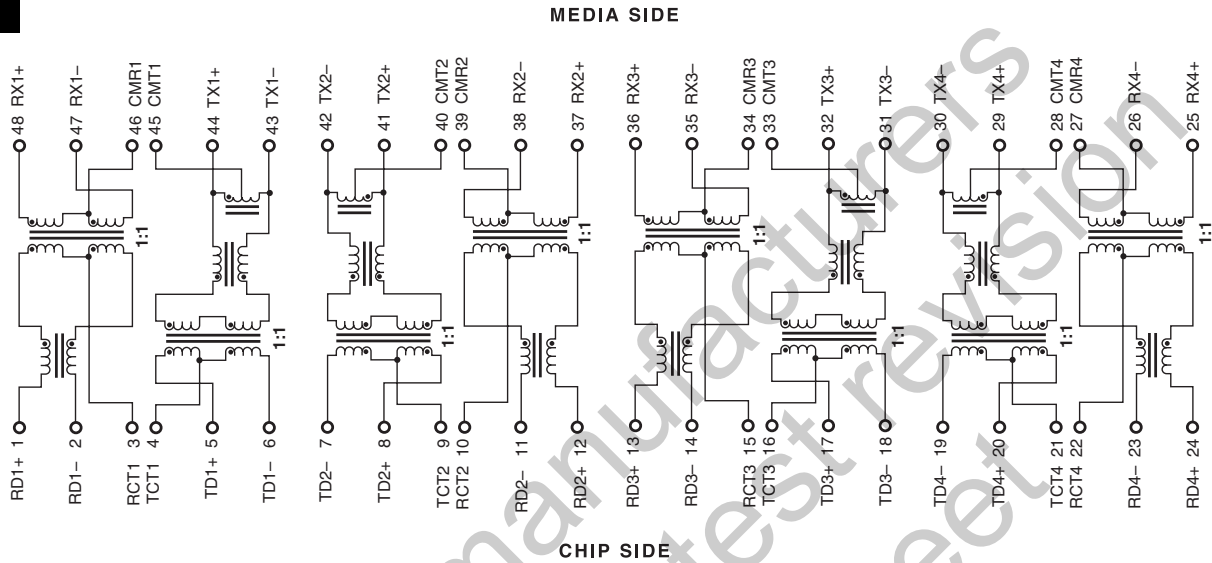
POWER OVER ETHERNET (PoE) MAGNETICS

10/100BASE-TX VoIP Magnetics Modules

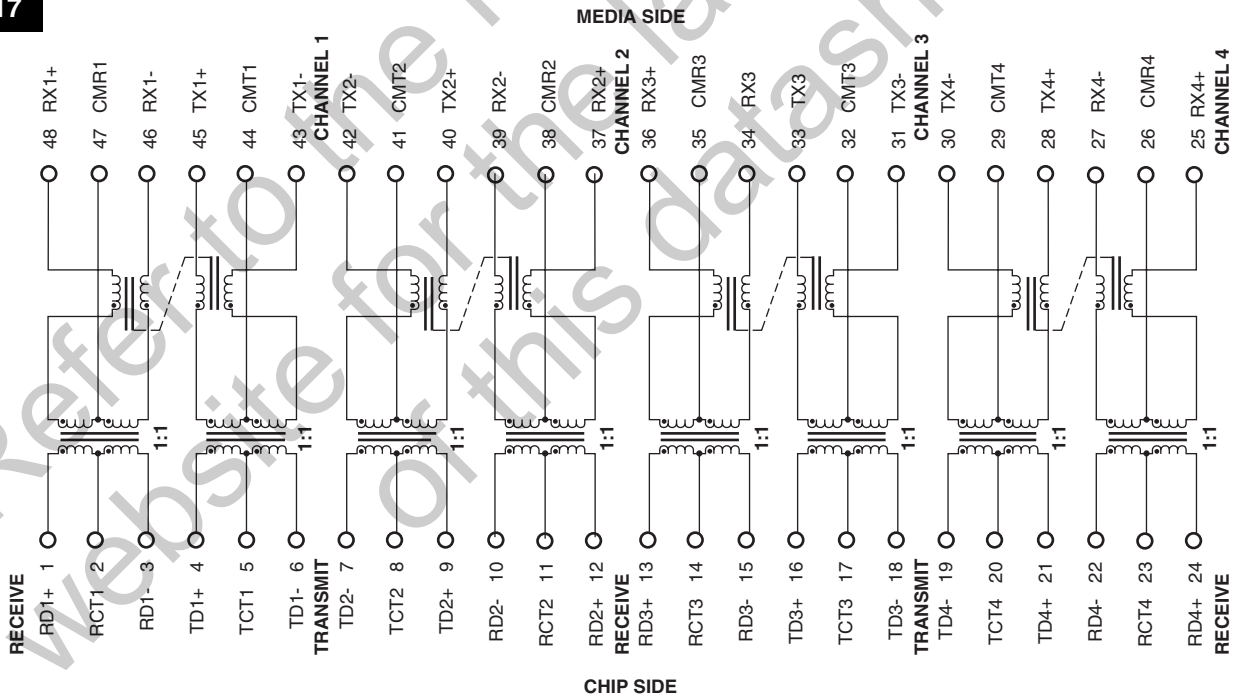


Schematics (continued)

H2014



H2017



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