

Star Magnetics™

10/100BASE-T Transformer Modules

with PoE* Option and 1:1 Turns Ratios

*Power over Ethernet



- RoHS-5 peak reflow temperature rating 235°C
- RoHS-6 peak reflow temperature rating 245°C
- Meets IEEE 802.3 specification
- Compact footprint

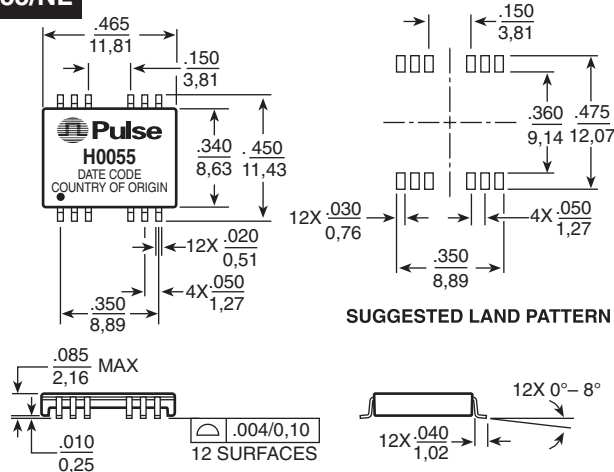
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

RoHS-5 ⁶ Compliant Part Number	RoHS-6 ⁷ Compliant Part Number	PoE	Number of Ports	Insertion Loss (dB MAX)			Return Loss (Z out = 100 Ω ±15%)			Crosstalk (adjacent channels, dB MIN)			Hipot (VRMSMIN)
				0.1 MHz	1 MHz	100 MHz	30 MHz	60 MHz	80 MHz	30 MHz	60 MHz	100 MHz	
H0055 ¹	H0055NL ^{1, 8a}	No	1	-2.5	—	-1.0	-16	-10	-10	-45	-40	-33	1500
—	H0056NL ^{2, 8a}	No	1	—	-0.8	-0.9	-16	-10	-10	-45	-40	-33	1500
H1259	H1259NL ^{8a}	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1259 ³	HX1259NL ^{8a}	No	4	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H1260	H1260NL ^{8a}	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX1260 ³	HX1260NL ^{8a}	No	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H1265	H1265NL ^{7, 8a}	No	1	-1.3	—	-1.0	-16	-10	-10	-40	-38	-33	1500
H1266	H1266NL ^{7, 8a}	No	4	-1.2	—	-1.0	-16	-10	-10	-45	-40	-30	1500
H1278	H1278NL ^{7, 8a}	No	1	-1.1	—	-1.0	-16	-10	-10	-45	-40	-33	1500
H1305	H1305NL ^{8a}	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX1305 ³	HX1305NL ^{8a}	No	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
H2260	H2260NL ^{8a}	Yes ⁴	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
HX2260 ³	HX2260NL ^{7, 8a}	Yes ⁴	1	-1.1	—	-1.1	-16	-10	-10	-35	-30	-30	1500
H2305	H2305NL ^{8a}	Yes ⁴	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500
HX2305 ³	HX2305NL ^{8a}	Yes ⁴	2	-1.2	—	-1.4	-16	-10	-10	-45	-40	-33	1500

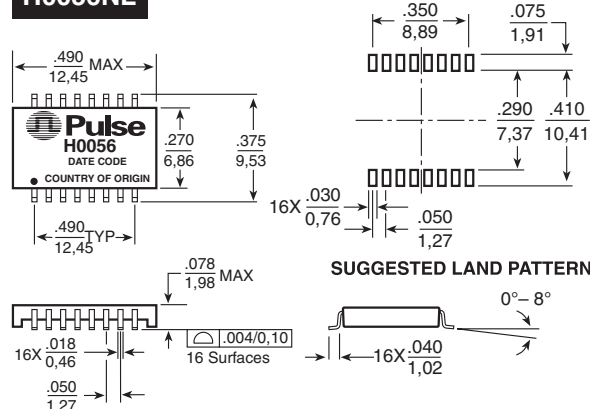
- H0055 is designed to meet 200 μH nom.
- H0056NL is designed to meet 300 μH nom.
- Parts offer extended temperature of operation -40 to +85°C
- These parts are compliant to IEEE802.3af Power over Ethernet (PoE) standard.
- For **Tape & Reel packaging** add a "T" suffix to the end of the part number when ordering, e.g. H0056NLT
- RoHS-5:** Product does not contain 5 out of the 6 banned substances specified in the RoHS directive (product contains lead in applications considered solder).
- RoHS-6:** Product does not contain 5 out of the 6 banned substances specified in the RoHS directive. Some internal connections may contain lead in high-temperature solder (solder alloys containing more than 85% lead).
- MSL=Moisture Sensitivity Level:** a=1, b=2, c=3, d=4, e=5

Mechanicals

H0055/NL



H0056NL



Weight355 grams
Tape & Reel . . .1000/reel
Tube40/tube

Dimensions: Inches
mm

Unless otherwise specified, all tolerances are ±.010
0.25

Weight3 grams
Tape & Reel . . .2000/reel
Tube40/tube

USA 858 674 8100 • Germany 49 7032 7806 0 • Singapore 65 6287 8998 • Shanghai 86 21 32181071 • China 86 755 33966678 • Taiwan 886 3 4641811

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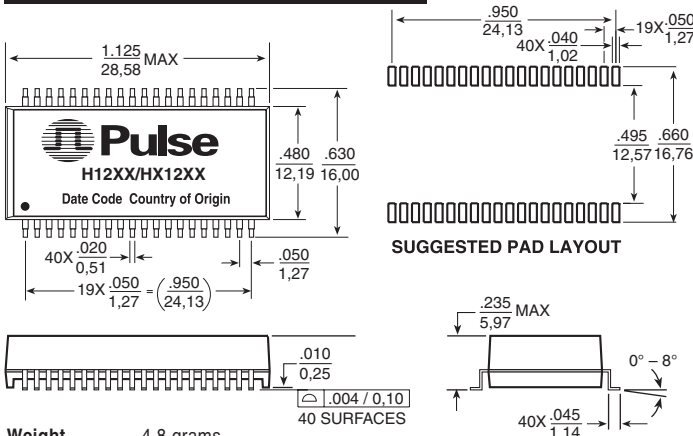
Star Magnetics™ 10/100BASE-T Transformer Modules with PoE* Option and 1:1 Turns Ratios

*Power over Ethernet



Mechanicals (continued)

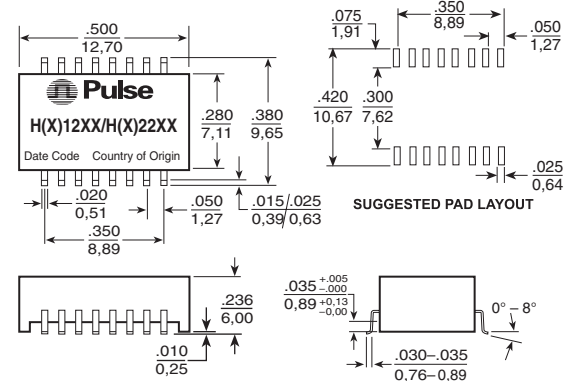
H1259/NL, HX1259/NL, H1266/NL



Weight4.8 grams
Tape & Reel250/reel
Tube15/tube

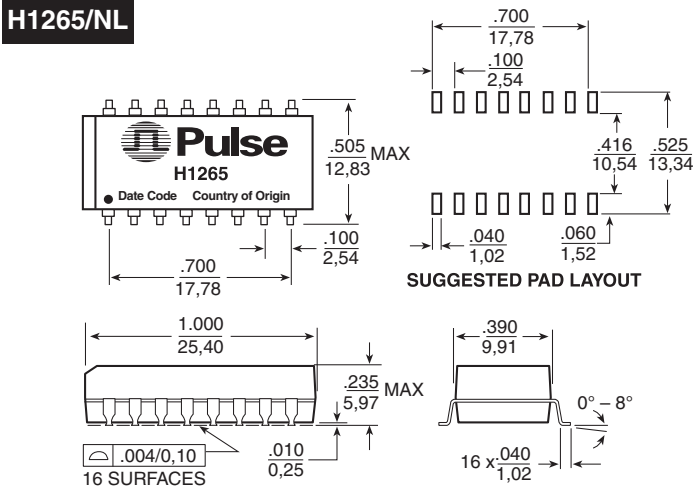
Dimensions: Inches mm Unless otherwise specified, all tolerances are $\pm .010$
mm

H1260//NL, HX1260//NL, H2260/NL, HX2260/NL



Weight2.8 grams
Tape & Reel45/tube
Tube600/reel

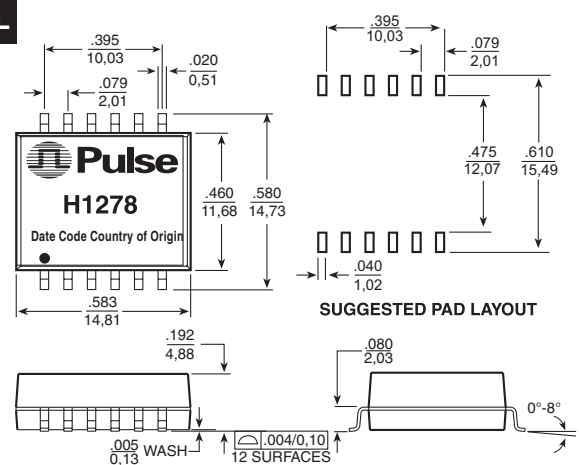
H1265/NL



Weight3.0 grams
Tape & Reel20/tube
Tube300/reel

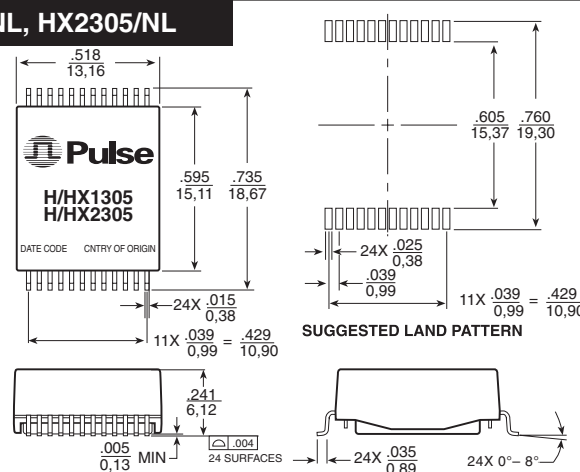
Dimensions: Inches mm Unless otherwise specified, all tolerances are $\pm .010$
mm

H1278/NL



Weight1.7 grams
Tape & Reel350/reel
Tube30/tube

H1305/NL, HX1305/NL, H2305/NL, HX2305/NL



Weight2.7 grams
Tape & Reel300/reel
Tube25/tube

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

Star Magnetics™

10/100BASE-T Transformer Modules

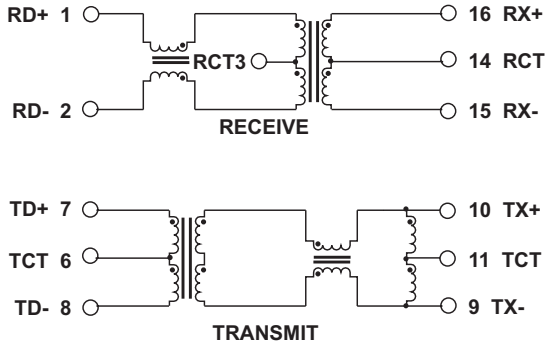
with PoE* Option and 1:1 Turns Ratios

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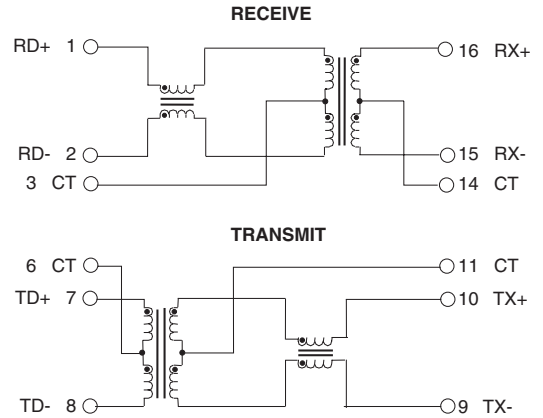


Schematics

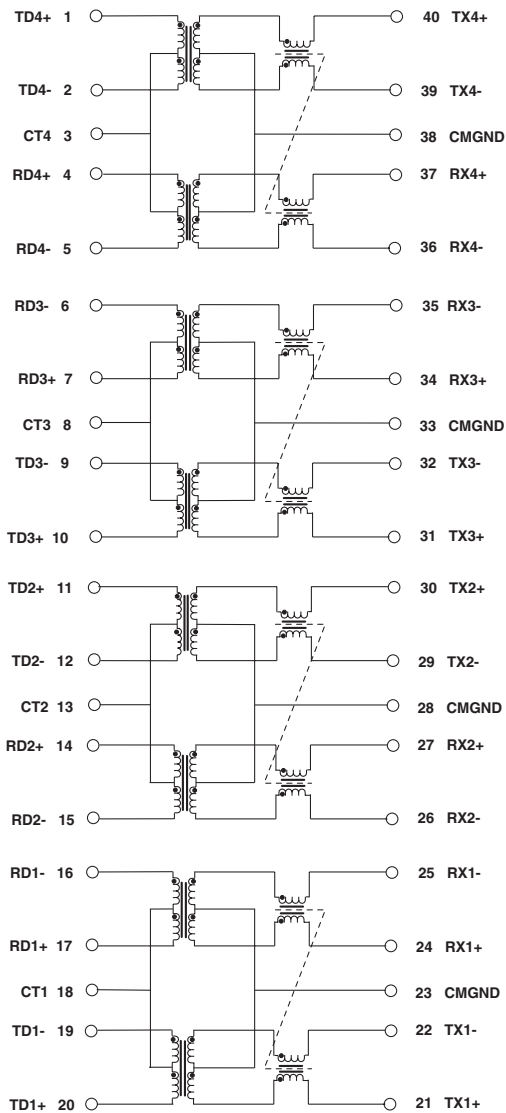
H0055/NL



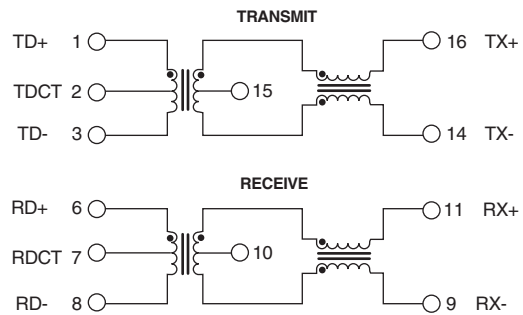
H0056NL



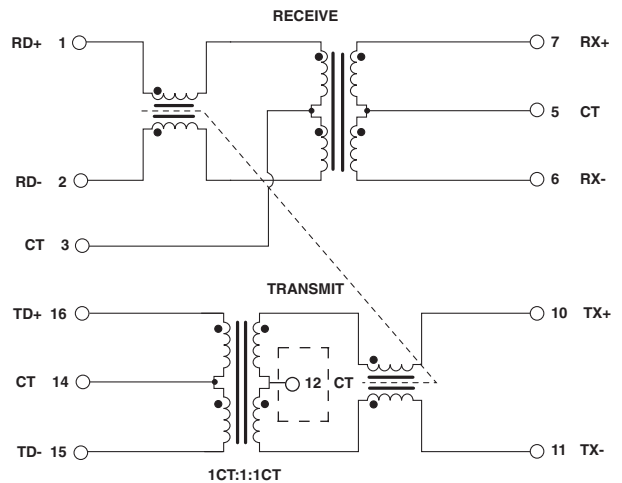
H1259/NL, HX1259/NL



H1260/NL, HX1260/NL



H1265/NL



H1265: 3-core design (T3 same toroid core)

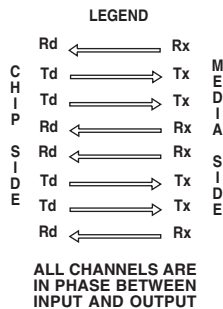
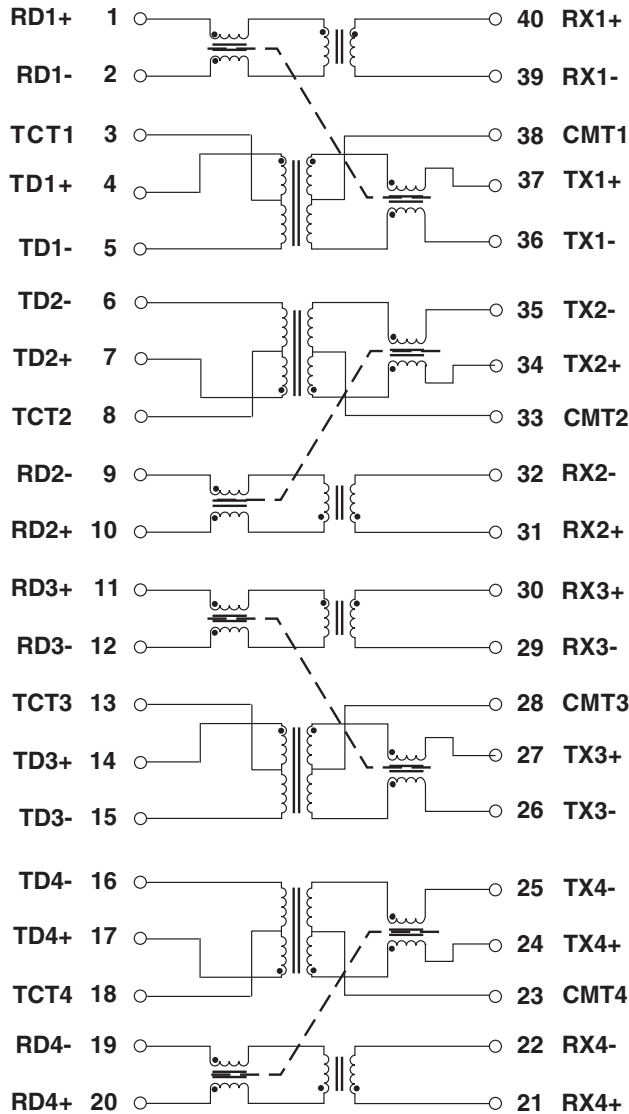
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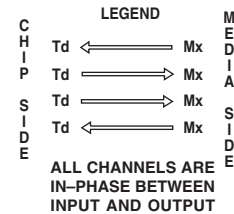
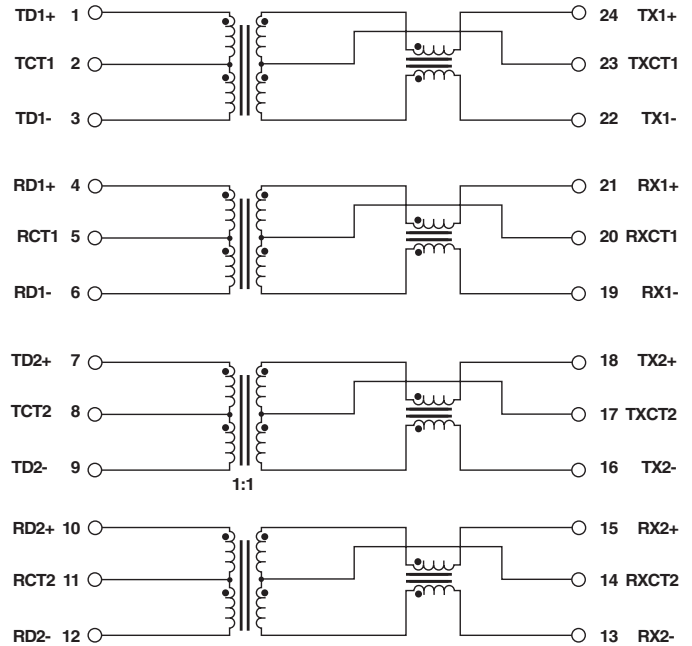


Schematics (continued)

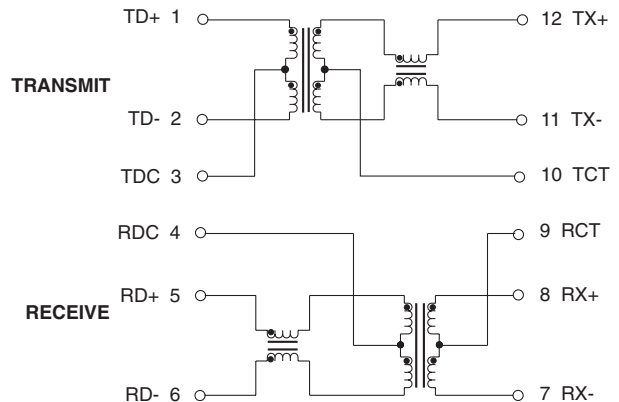
H1266/NL



H1305/NL, HX1305/NL



H1278/NL



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10/100BASE-T Transformer Modules

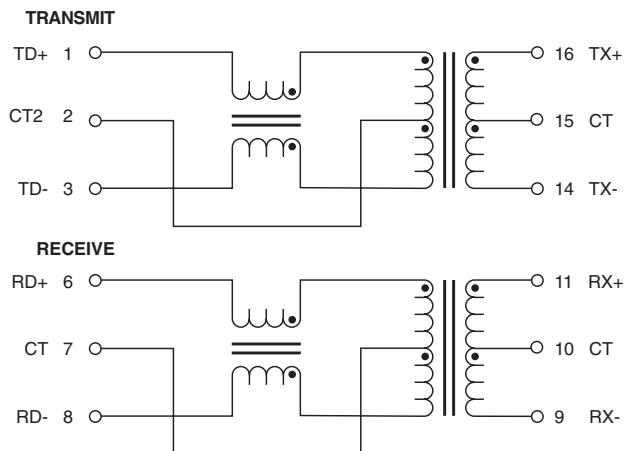
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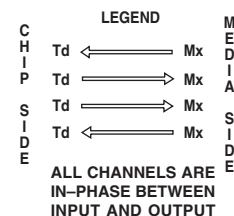
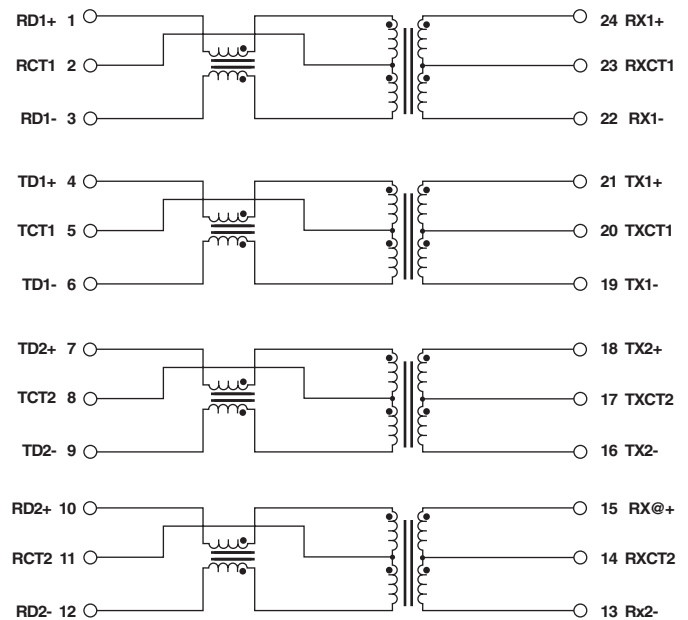


Schematics (continued)

H2260/NL, HX2260/NL



H2305/NL, HX2305/NL



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