

Description:

10/100/1000 Base-T single port (1x1) RJ45 integrated connector module (ICM), designed to support Network Interface Cards (NIC), LAN-on-Motherboard (LOM), and PC applications. Available in Tab-UP configuration, and with or without LEDs.



Features and Benefits:

- RoHS peak wave solder temperature rating 260°C
- Suitable for CAT 5 and 6 Fast Ethernet cable or better UTP

Electrical Performance Summary:

- Meets IEEE 802.3 specification
- 350μH minimum OCL with 8mA bias current
- High performance for maximum EMI suppression

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

RoHS Part No.	Tab Orientation	LEDs ¹ L/R	Insertion Loss TX/RX (dB)	Return Loss (dB TYP) 100Ω (±15Ω)					Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (MIN)
			1-100 MHz	1-10 MHz	30 MHz	60-80 MHz	80-100 MHz	1-10 MHz	32-65 MHz	65-100 MHz	1-125 MHz	125-500 MHz	@60Hz 1 MIN	
JK0-0004NL	UP	G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0-0014NL	UP	G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0-0016NL	UP	Y-G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0-0017NL	UP	NONE	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0-0018NL ²	UP	NONE	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0-0036NL	UP	Y-G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0654219NL	UP	G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	

Notes: 1. LEDs Left/Right: G = green; Y = yellow; Y-G = Bicolor. 2. JK0-0018NL is supplied without EMI tabs; refer to Mechanical drawing for explanation of EMI tabs.

RJ45 Durability Testing Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JK Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20 lbs./9.072 kgs.

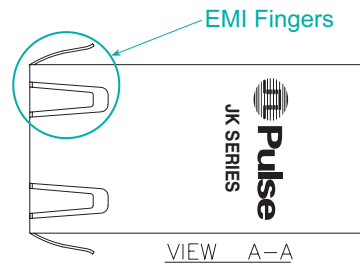
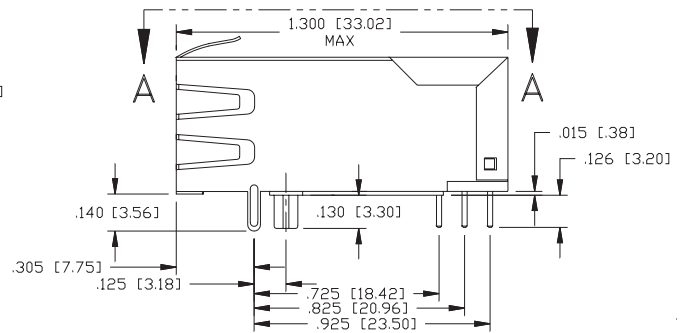
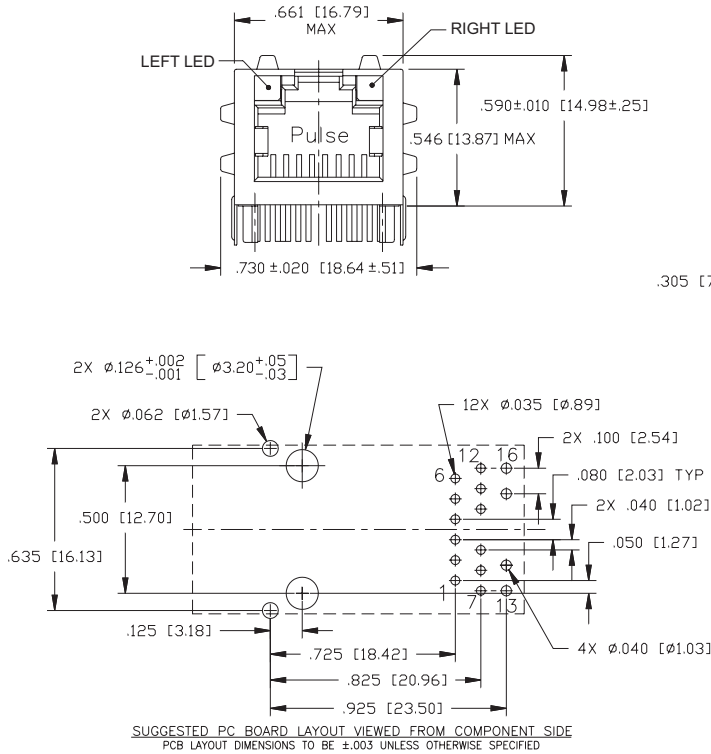
RJ45 Material Specification

Part Number	Shield		Contact			Housing		MSL Rating
	Material	Finish	Material	Plating Area	Solder Area	Material	Specification	
JK Series	Brass	20-40μ inches thick nickel over brass	Phosphor Bronze	15μ inches gold over 30-80μ inches nickel	75-300μ inches tin over 75-300μ inches nickel	Thermoplastic	UL 94 V-0	1

Notes: 1. Connector dimensions comply with FCC dimension requirements.

Mechanical

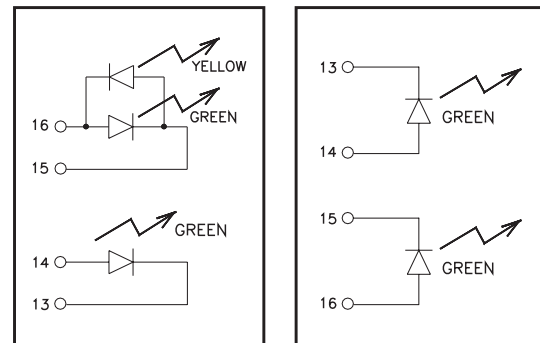
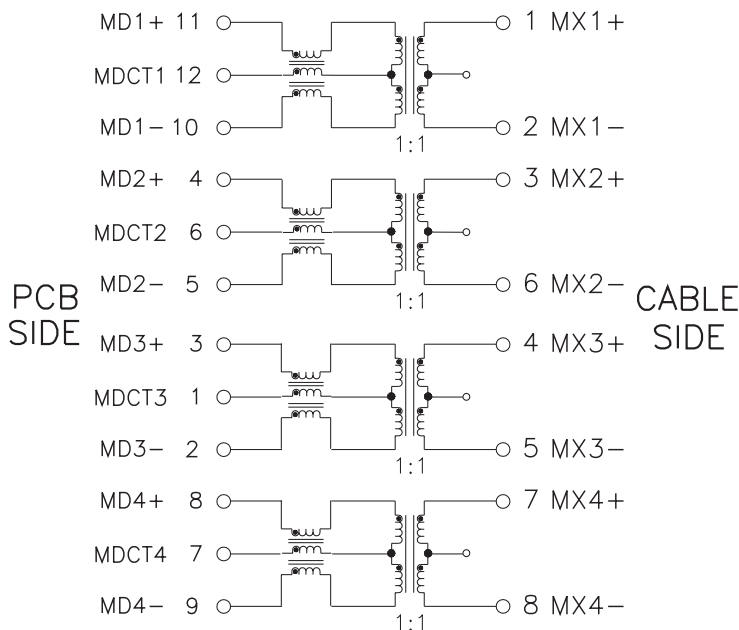
JK0-0004NL / JK0-001XNL / JK0-0036NL / JK0654219NL



NOTE: JK0-0017NL and JK0-0018NL are supplied without LEDs.

Schematic

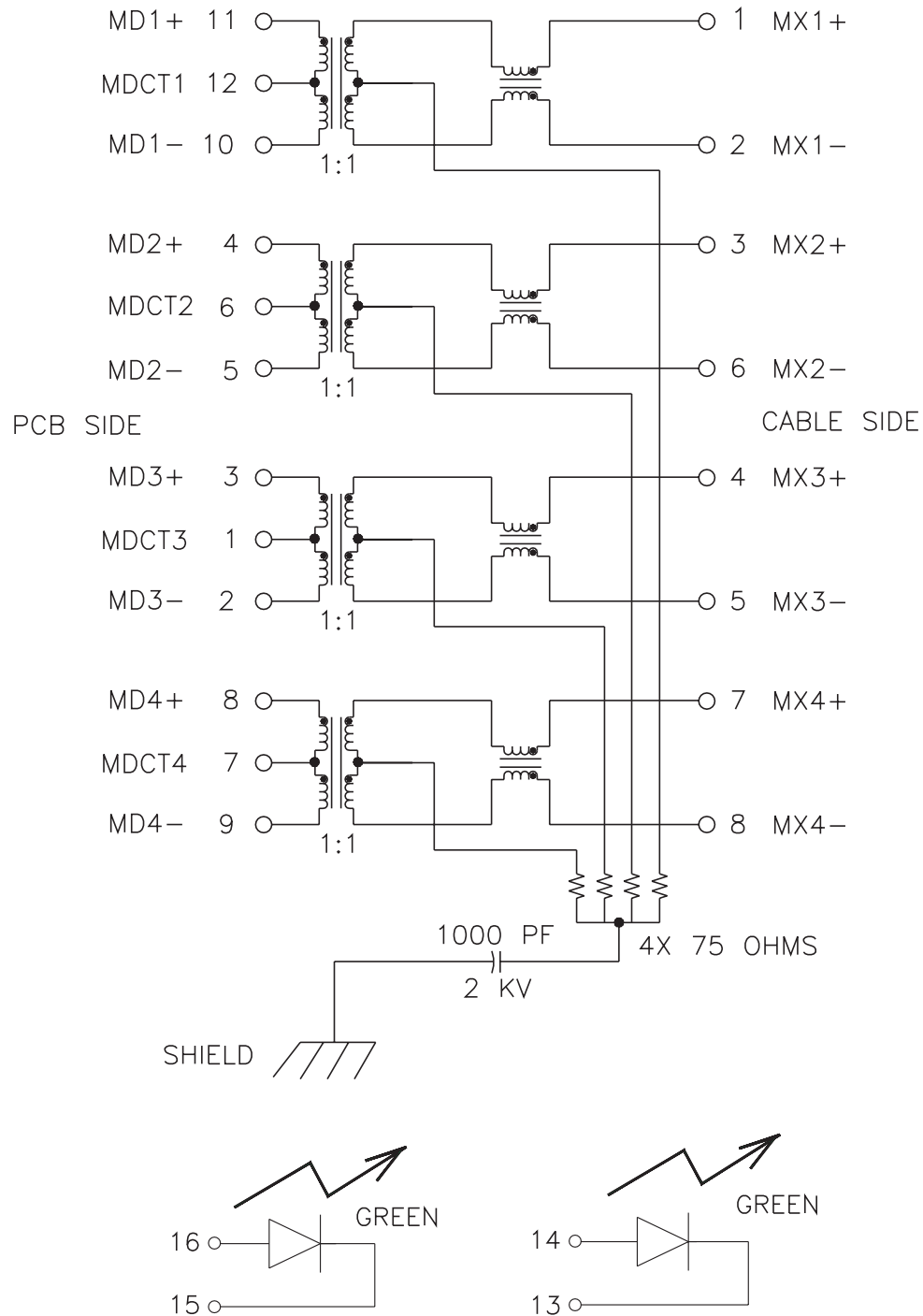
JK0-001XNL



NOTE: JK0-0017NL and JK0-0018NL are supplied without LEDs.

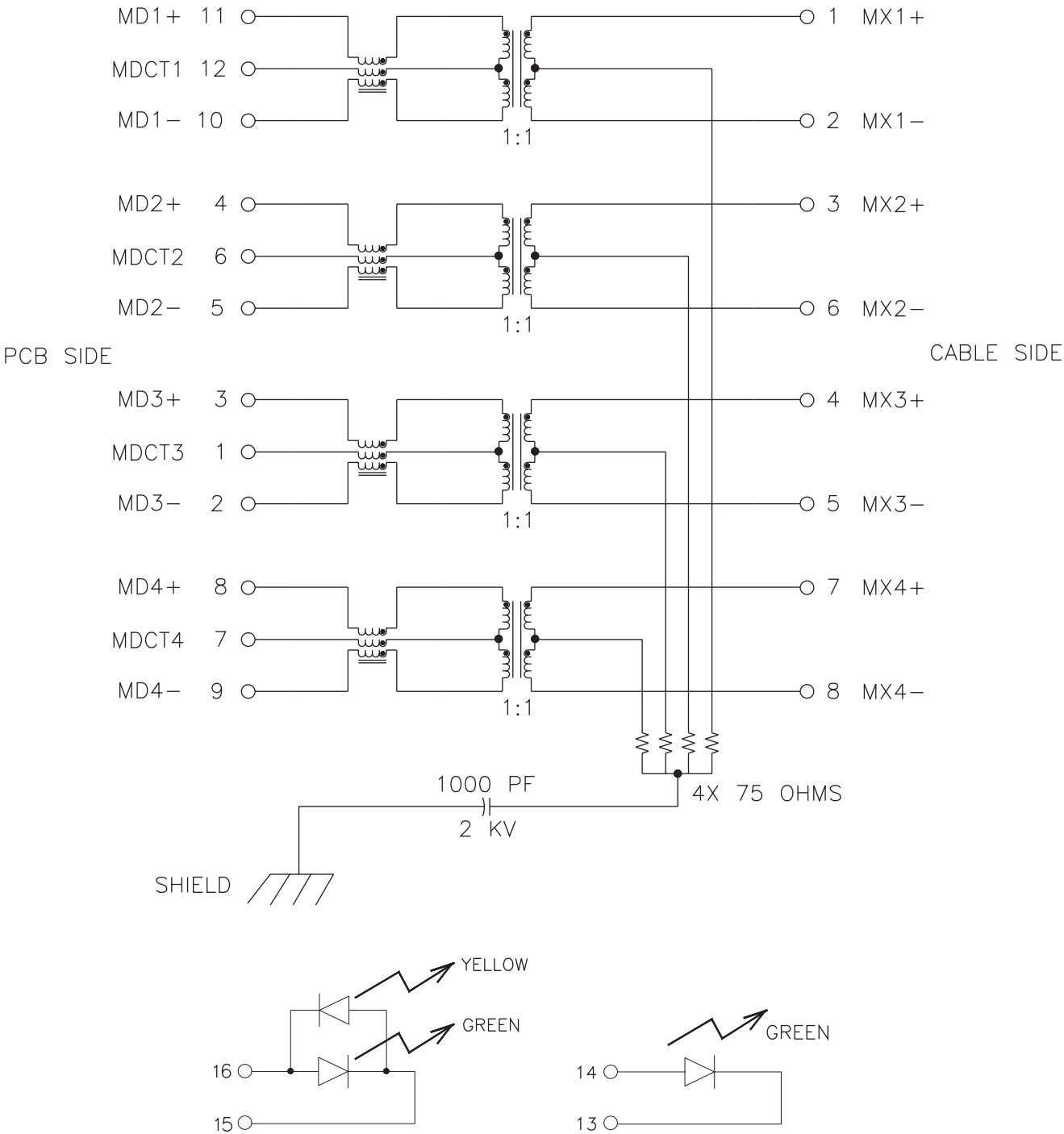
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JK0-0004NL



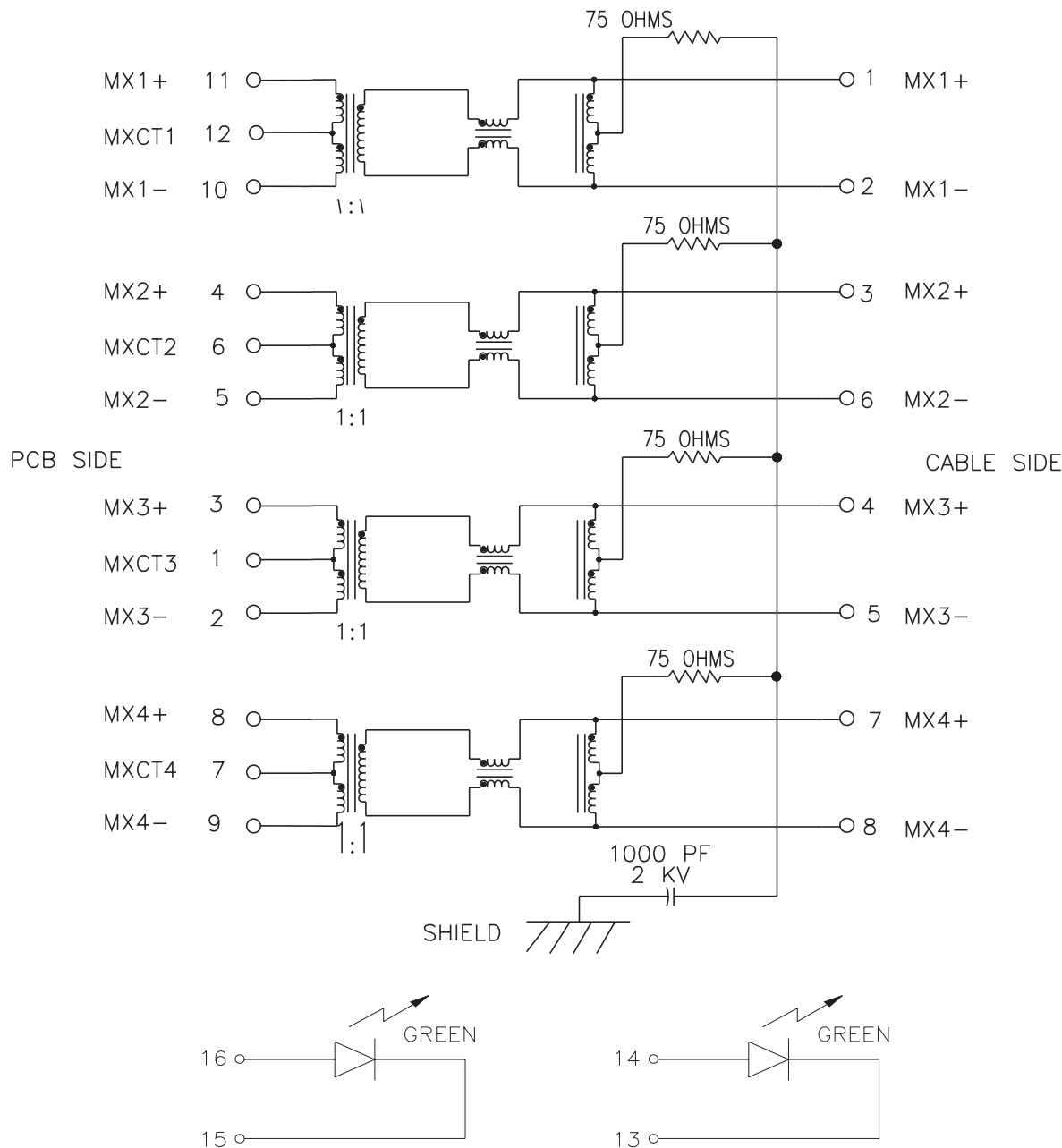
Schematic

JK0-0036NL



Schematic

JK0654219NL



For More Information:

Pulse Worldwide Headquarters
12220 World Trade Dr.
San Diego, CA 92128
U.S.A.
www.pulseeng.com

Pulse European Headquarters
Einsteinstrasse 1
D-71083 Herrenberg
Germany

Pulse China Headquarters
B402, Shenzhen Academy of
Aerospace Technology Bldg.
10th Kejinan Rd.
High-Tech Zone
Nanshan District
Shenzhen, PR China 518057
TEL: 86 755 33966678
FAX: 86 755 33966700

Pulse North China
Room 1503
XinYin Building
No. 888 YiShan Rd.
Shanghai 200233
China
TEL: 86 21 32181071
FAX: 86 21 32181396

Pulse South Asia
150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324
TEL: 65 6287 8998
FAX: 65 6280 0080

Pulse North Asia
No. 26
Kao Ching Rd.
Yang Mei Chen
Taoyuan Hsien
Taiwan, R. O. C.
32667
TEL: 886 3 4643715
FAX: 886 3 4641911

TEL: 858 674 8100
FAX: 858 674 8262

TEL: 49 7032 7806 0
FAX: 49 7032 7806 12

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