

PCA, alternative (?) mainboard cable connector

MOLEX connectors, 2.5 mm, Nano-Fit 105300 Series, Key Features

Product Specification	link
Operating Temperature	-40°C to 115°C (gold)
Voltage	250 V AC(RMS) / DC
Wire Gauge / Insulation	26 AWG / 1.27 mm max.
	24 AWG / 1.27 mm max.
	22 AWG / 1.57 mm max.
	20 AWG / 1.57 mm max.
Current Rating, 24 AWG	4.83A (based on temperature rise < 30°C)
Durability, min. Mating Rate	50 cycles (gold), per EIA-364-09
Dielectric Withstanding Voltage	1800V DC for 1 minute, per EIA 264-20

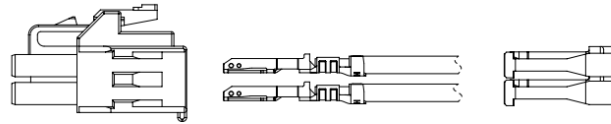
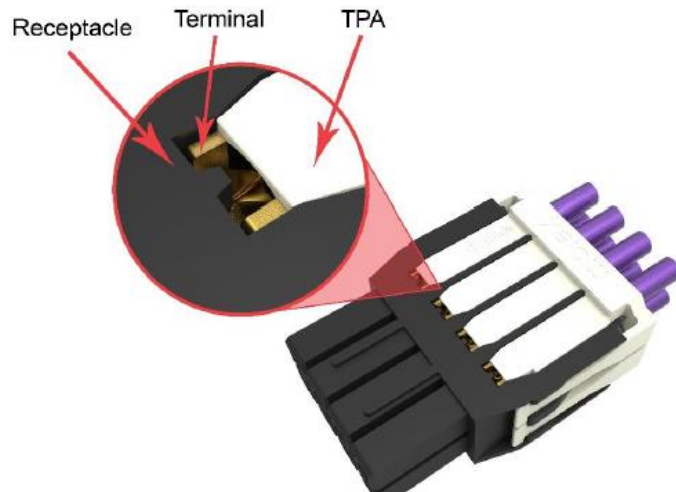
Ordering

item	MOLEX-ID		Remark
Connector PCA Cable end	1053081208		
Crimp pins 24 AWG	1053001200 (0.38u Au)		8x, Gold plated
TPA	1053251004		2x, Terminal Position Assurance Retainer
Connector PCB	1053101208 (0.38u Au) 1053121308 (0.76u Au)		Right angle also exists: 1053141208 1053141308

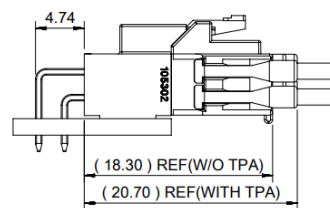
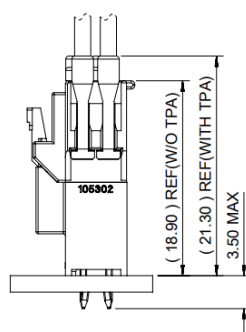
Crimp Tool AWG all (?)	0638276000		Digi-key: 352,24 €
Crimp Tool 24-26 AWG	2002186500		Digi-key: 294,76 €
Extraction Tool 20-26 AWG	0638244600		Digi-key: 28,75 €

TPA (Terminal Position Assurance Retainer) Function

- a) Make sure crimp terminal is properly seated.
- b) Increase crimp terminal retention force to receptacle, the spec is defined in section

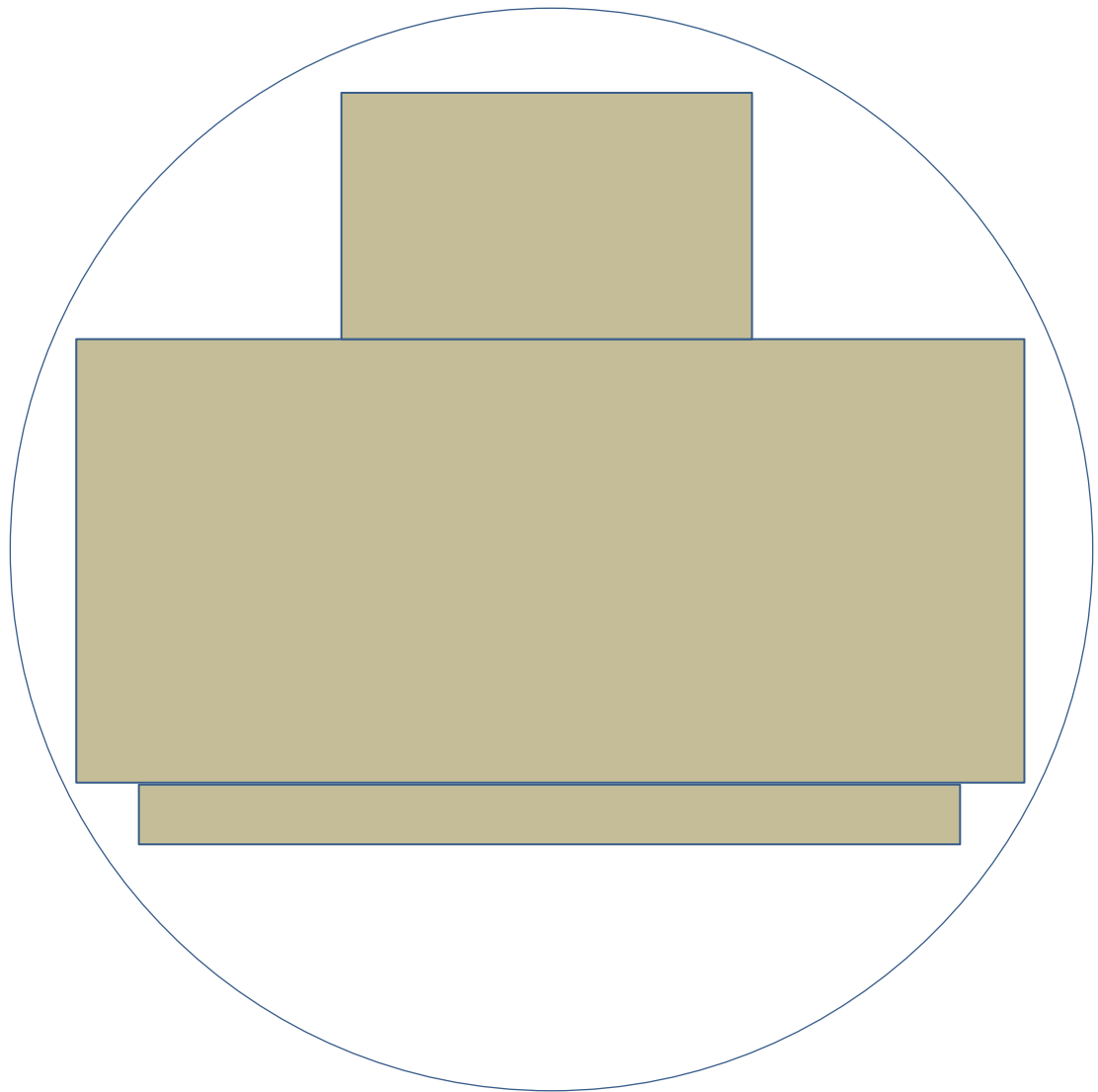


TERMINAL AND TPA ORIENTATION



Cable connector MOLEX 1053081208, 5/8" - 18UNF Nut, feed through test

See scaled sketch below, nut 5/8" - 18UNF -> core diameter of 14.5 mm



PCA, interior connection to MOLEX 1053081208 (housing) + 1053001200 (pins)

pin	signal	pair	color	remark
1	ICM_WP_ADR2	1	white	
2	ICM_WP_ADR1	1	black	
3	ICM_WP_ADR0	2	black	
4	ADDR_RTN	2	green	
5	LINE_N	3	black	
6	DRAIN (Shield)			
7	LINE_P	3	red	
8				

