1.27 mm SMC Board-to-Board Adapter

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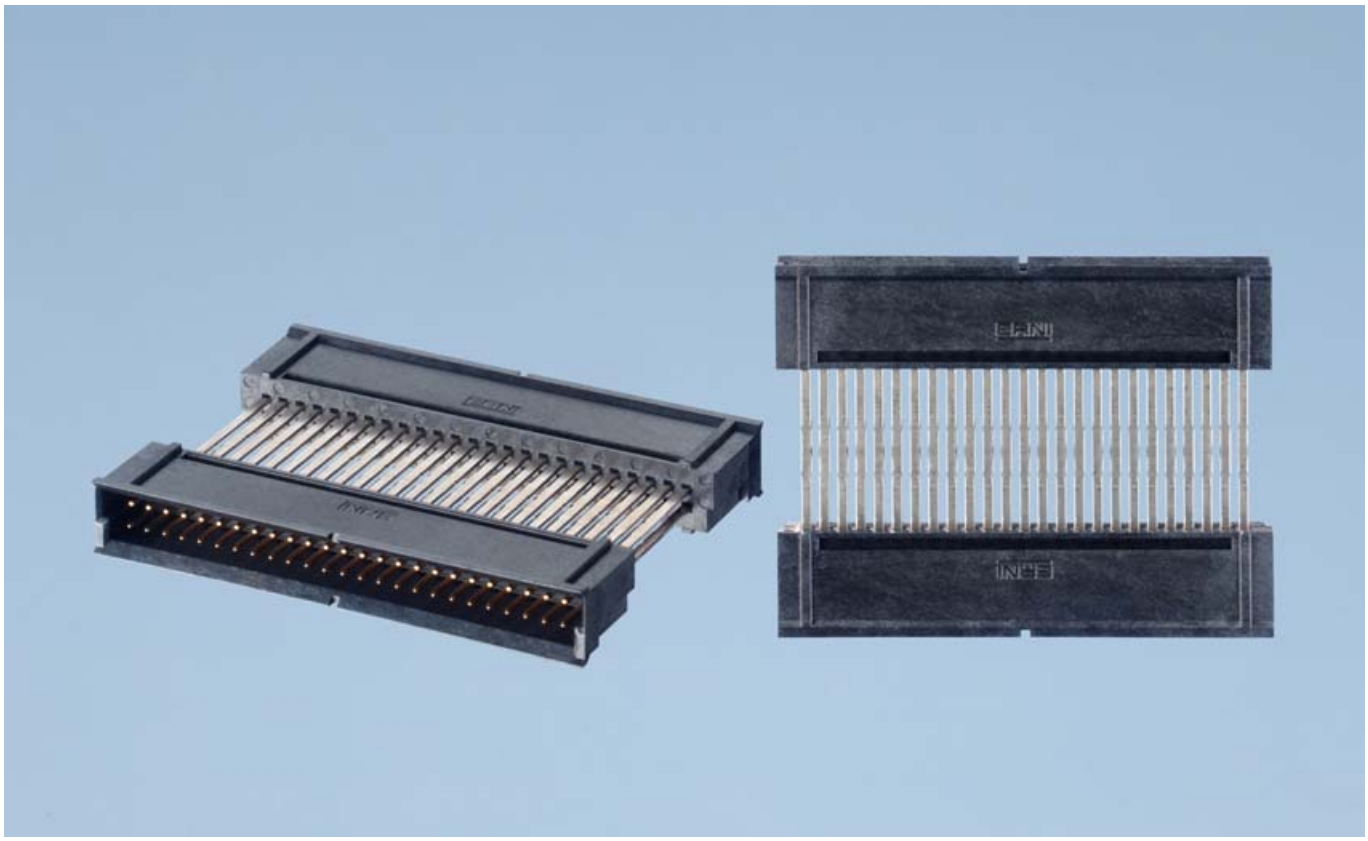

The SMC Board-to-Board-Adapter is an exciting addition to the extensive SMC 1.27mm (.050") pitch connector line, offering impressive flexibility in its board-to-board heights ranging from 20 mm to 40 mm in 2 mm increments.
Available in 12, 26, 50, 68 and 80 pins, the SMC Adapter has male contacts on both component ends, and securely locks into a female SMC connector for a robust assembled solution.
To protect the daughter card from handling mishaps, the SMC Adapter can be attached during the end-of-assembly process.

Features

- Number of pins: 12, 26, 50, 68, 80
- Pitch: 1.27 mm
- Board-to-board height with female connectors (6.25 mm): 20-38 mm (by utilization of the wipe length, continuously variable board-to-board heights of 20-40 mm)
- Male connectors on both sides
- Tray packaging
- Robust interlocking on one side

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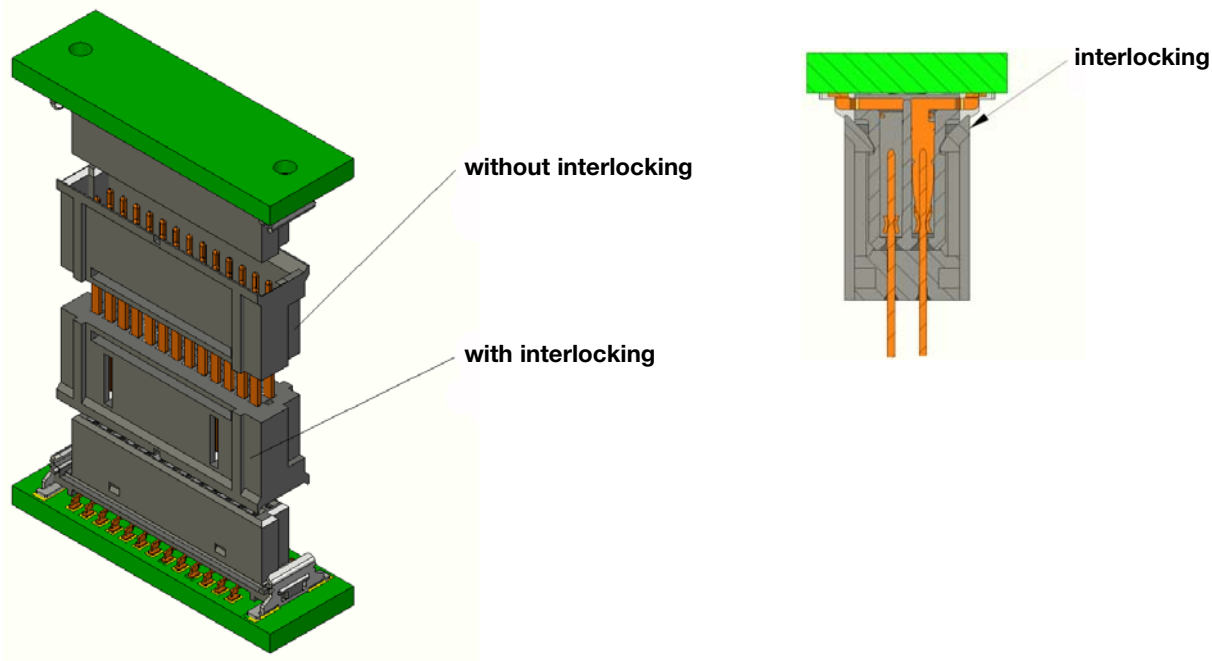
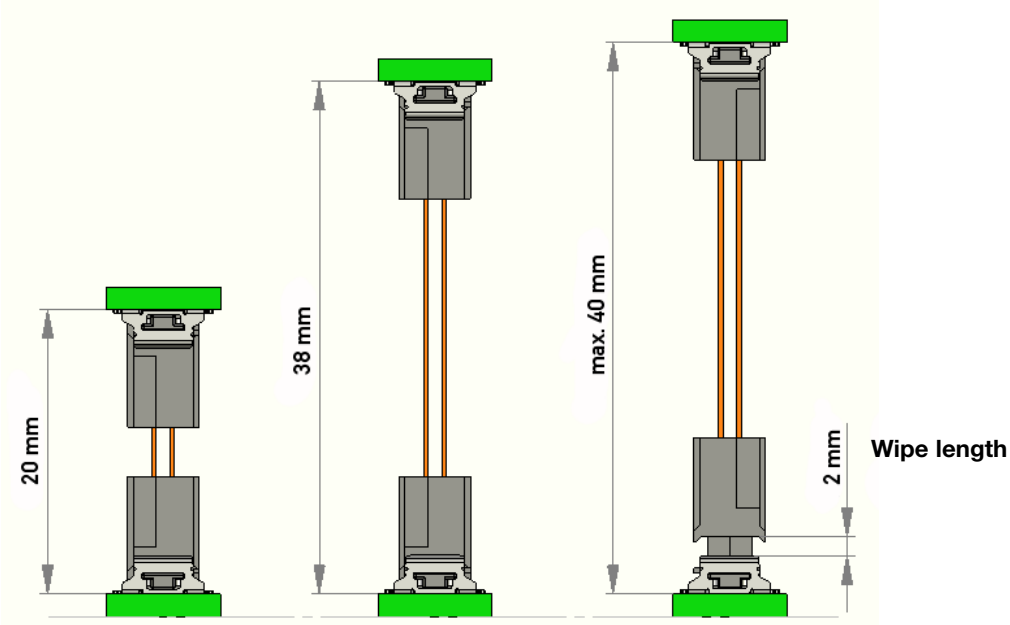
Mating Conditions

Mating Principle



Board-to-Board Height



Notice:
PCBs have to be secured by spacers.

1.27 mm SMC Board-to-Board Adapter

Electrical and Mechanical Characteristics

	Standard	Board-to-Board Adapter
Number of Pins		12, 26, 50, 68, 80
Technical data		
Climate category	DIN EN 60068-1 test b	-55/125/56
Temperature range		-55/125 °C
Current rating per contact	IEC60512 test 5b	20°C 70°C 100°C 12pin 1.6 A 1.1 A 0.7 A 26pin 1.3 A 0.9 A 0.6 A 50pin 1.1 A 0.8 A 0.5 A 68pin 1.0 A 0.8 A 0.5 A 80pin 1.0 A 0.8 A 0.5 A The mentioned current carrying capacity values are standard values, which are reached without taking any special measures. Significant higher values are possible, if pcb design matches the connector performance. For further information please contact your ERNI sales person.
Air – and creepage distance		0.4 mm
Operating voltage	IEC 60664	The permissible operating voltages depend on the customer application and on the applicable or specified safety requirements.Insulation coordination according to IEC 60664-1 has to be regarded for the complete electrical device. Therefore, the maximum creepage and clearance distances of the mated connectors are specified for consideration as a part of the whole current path. In practice, reductions in creepage or clearance distances may occur due to the conductive pattern of the printed board or the wiring used, and have to be taken into account separately.As a result the creepage and clearance distances for the application may be reduced compared to those of the connector.
Dielectric strength	IEC 60512 test 4a	contact – contact 500 V_{rms}
Contact resistance	IEC 60512 test 2a	< 25 mΩ
Insulation resistance	IEC 60512 test 3a	> 10^4 MΩ
Vibration, sine	IEC 60512 test 6d	10 – 2000 Hz 20 g
Contact disturbance (while vibration test)	IEC 60512 test 2e	< 1 µs
Shock, halfsine	IEC 60512 test 6c	50 g 11 ms
Contact disturbance (while shock test)	IEC 60512 test 2e	< 1 µs
Mechanical operation (mating cycles)	IEC 60512 test 9a	> 500 mating cycles Class 1
Insertion and withdrawal force	IEC 60512 test 13b	12pin: 6 N 26pin: 13 N 50pin: 26 N 68pin: 35 N 80pin: 40 N
Gauge retention force	IEC 60512 test 16e	> 0.1 N min.

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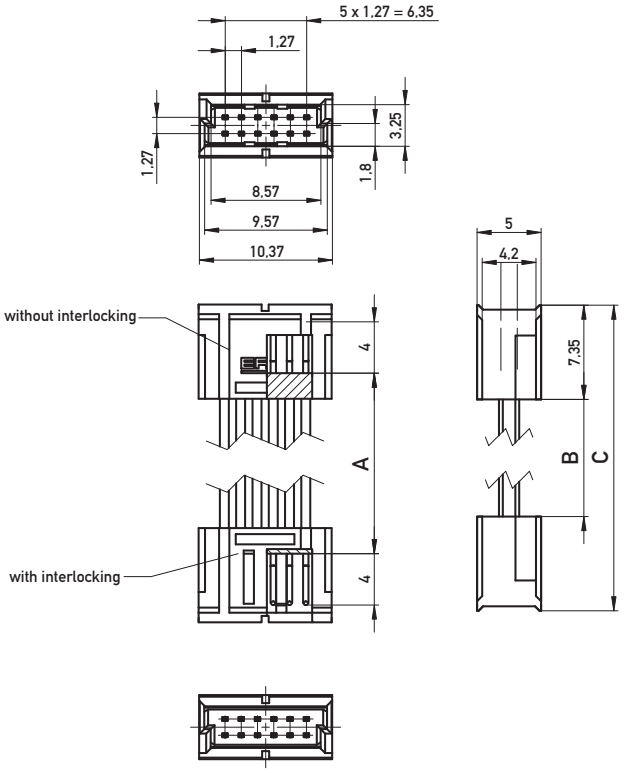
Electrical and Mechanical Characteristics

	Standard	Board-to-Board Adapter
Number of Pins		12, 26, 50, 68, 80
Housing materials		
Plastic material (symbol)		LCP
CTI value	IEC 112	CTI 175
UL flame rating		UL 94 V-0
UL file		E 83005
Contact materials		
Base material		Cu alloy
Mating area		Gold plating
Environment compatibility		
Recycling		no flame-retardent additives, no toxic additives allows easy recycling
Product-approval		
UL		E 84703

1.27 mm SMC Board-to-Board Adapter

12pin Versions

Dimensional Drawing



20	7,5	3,5	18,2
22	9,5	5,5	20,2
24	11,5	7,5	22,2
26	13,5	9,5	24,2
28	15,5	11,5	26,2
30	17,5	13,5	28,2
32	19,5	15,5	30,2
34	21,5	17,5	32,2
36	23,5	19,5	34,2
38	25,5	21,5	36,2
Stacking Height	A	B	C

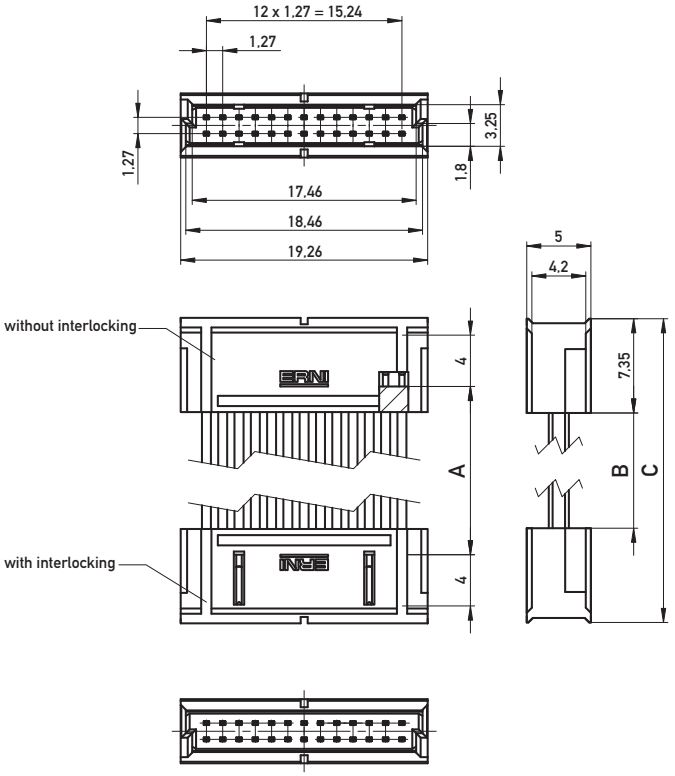
Ordering Information

Number of Pins	Board-to-Board Height, mated	Suitable Female Connector, Part Number	Packaging	Part Number
12	20 mm	154805	Tray/102 pcs	364094
12	22 mm	154805	Tray/90 pcs	364095
12	24 mm	154805	Tray/84 pcs	364096
12	26 mm	154805	Tray/78 pcs	364097
12	28 mm	154805	Tray/72 pcs	364098
12	30 mm	154805	Tray/66 pcs	364099
12	32 mm	154805	Tray/60 pcs	364100
12	34 mm	154805	Tray/54 pcs	364101
12	36 mm	154805	Tray/54 pcs	364102
12	38 mm	154805	Tray/48 pcs	364103

1.27 mm SMC Board-to-Board Adapter

26pin Versions

Dimensional Drawing



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24	11,5	7,5	22,2
26	13,5	9,5	24,2
28	15,5	11,5	26,2
30	17,5	13,5	28,2
32	19,5	15,5	30,2
34	21,5	17,5	32,2
36	23,5	19,5	34,2
38	25,5	21,5	36,2
Stacking Height	A	B	C

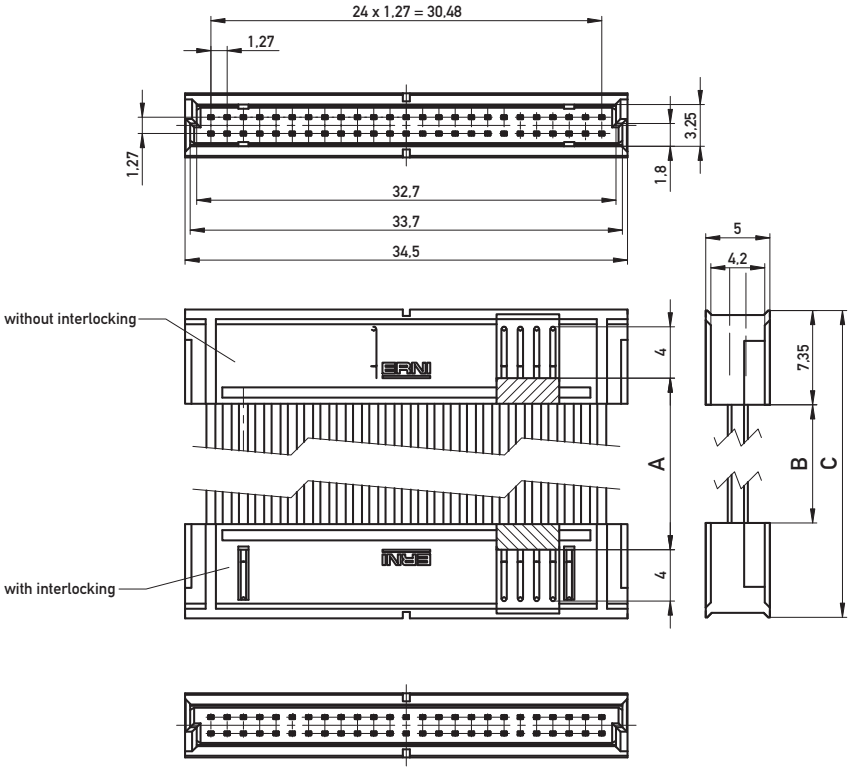
Ordering Information

Number of Pins	Board-to-Board Height, mated	Suitable Female Connector, Part Number	Packaging	Part Number
26	20 mm	154806	Tray/68 pcs	364084
26	22 mm	154806	Tray/60 pcs	364085
26	24 mm	154806	Tray/56 pcs	364086
26	26 mm	154806	Tray/52 pcs	364087
26	28 mm	154806	Tray/48 pcs	364088
26	30 mm	154806	Tray/44 pcs	364089
26	32 mm	154806	Tray/40 pcs	364090
26	34 mm	154806	Tray/36 pcs	364091
26	36 mm	154806	Tray/36 pcs	364092
26	38 mm	154806	Tray/32 pcs	364093

1.27 mm SMC Board-to-Board Adapter

50pin Versions

Dimensional Drawing



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26	13,5	9,5	24,2
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30	17,5	13,5	28,2
32	19,5	15,5	30,2
34	21,5	17,5	32,2
36	23,5	19,5	34,2
38	25,5	21,5	36,2
Stacking Height	A	B	C

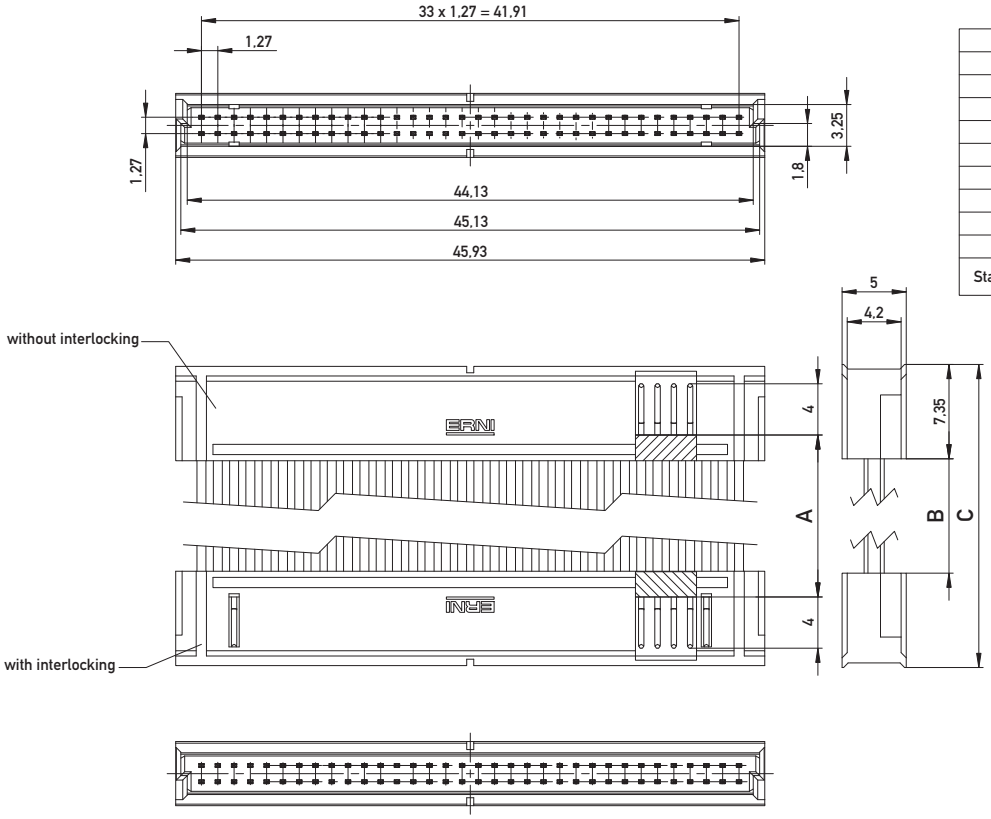
Ordering Information

Number of Pins	Board-to-Board Height, mated	Suitable Female Connector, Part Number	Packaging	Part Number
50	20 mm	154807	Tray/34 pcs	354307
50	22 mm	154807	Tray/30 pcs	354308
50	24 mm	154807	Tray/28 pcs	354309
50	26 mm	154807	Tray/26 pcs	354310
50	28 mm	154807	Tray/24 pcs	354311
50	30 mm	154807	Tray/22 pcs	354312
50	32 mm	154807	Tray/20 pcs	354313
50	34 mm	154807	Tray/18 pcs	354314
50	36 mm	154807	Tray/18 pcs	354315
50	38 mm	154807	Tray/16 pcs	354316

1.27 mm SMC Board-to-Board Adapter

68pin Versions

Dimensional Drawing



20	7,5	3,5	18,2
22	9,5	5,5	20,2
24	11,5	7,5	22,2
26	13,5	9,5	24,2
28	15,5	11,5	26,2
30	17,5	13,5	28,2
32	19,5	15,5	30,2
34	21,5	17,5	32,2
36	23,5	19,5	34,2
38	25,5	21,5	36,2
Stacking Height	A	B	C

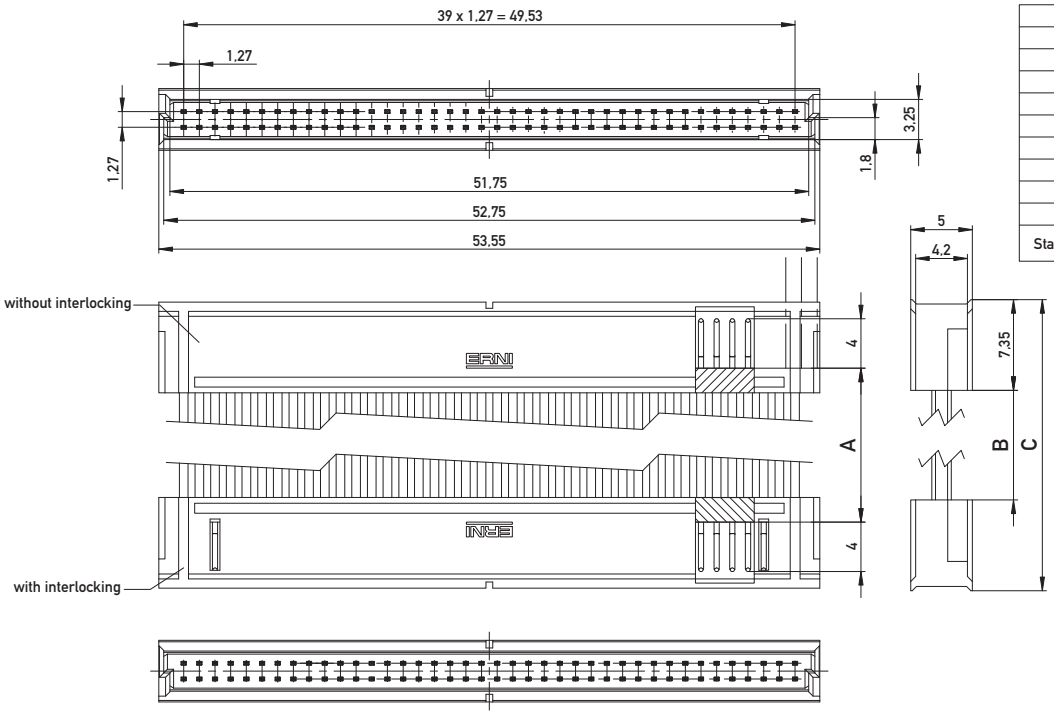
Ordering Information

Number of Pins	Board-to-Board Height, mated	Suitable Female Connector, Part Number	Packaging	Part Number
68	20 mm	154808	Tray/68 pcs	364715
68	22 mm	154808	Tray/60 pcs	364716
68	24 mm	154808	Tray/56 pcs	364717
68	26 mm	154808	Tray/52 pcs	364718
68	28 mm	154808	Tray/48 pcs	364719
68	30 mm	154808	Tray/44 pcs	364720
68	32 mm	154808	Tray/40 pcs	364721
68	34 mm	154808	Tray/36 pcs	364722
68	36 mm	154808	Tray/36 pcs	364723
68	38 mm	154808	Tray/32 pcs	364724

1.27 mm SMC Board-to-Board Adapter

80pin Versions

Dimensional Drawing



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24	11,5	7,5	22,2
26	13,5	9,5	24,2
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30	17,5	13,5	28,2
32	19,5	15,5	30,2
34	21,5	17,5	32,2
36	23,5	19,5	34,2
38	25,5	21,5	36,2
Stacking Height	A	B	C

Ordering Information

Number of Pins	Board-to-Board Height, mated	Suitable Female Connector, Part Number	Packaging	Part Number
80	20 mm	154809	Tray/51 pcs	364725
80	22 mm	154809	Tray/45 pcs	364726
80	24 mm	154809	Tray/42 pcs	364727
80	26 mm	154809	Tray/39 pcs	364728
80	28 mm	154809	Tray/36 pcs	364729
80	30 mm	154809	Tray/33 pcs	364730
80	32 mm	154809	Tray/30 pcs	364731
80	34 mm	154809	Tray/27 pcs	364732
80	36 mm	154809	Tray/27 pcs	364733
80	38 mm	154809	Tray/24 pcs	364734

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Part Number Index

Notes

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