

Direct Contact Socket for QFP, SOP

The test socket that enables high-speed transmission signal measurement by adopting the contact method that directly presses the device lead against the board.



Application

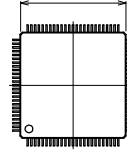
Mounting on PCB for mass-production
Final test and inspection at real environment
(ex. automobile, robotics, electrical devices for mobility)
IC failure analysis

Specification (typical)

Pitch : 0.4mm ~ *
Temperature Range : -40°C ~ +150°C
Acceptable device type : QFP, SOP **
Acceptable device size : □40 mm max

* There have limited on the number of pins.
** Also compatible with SOP devices.

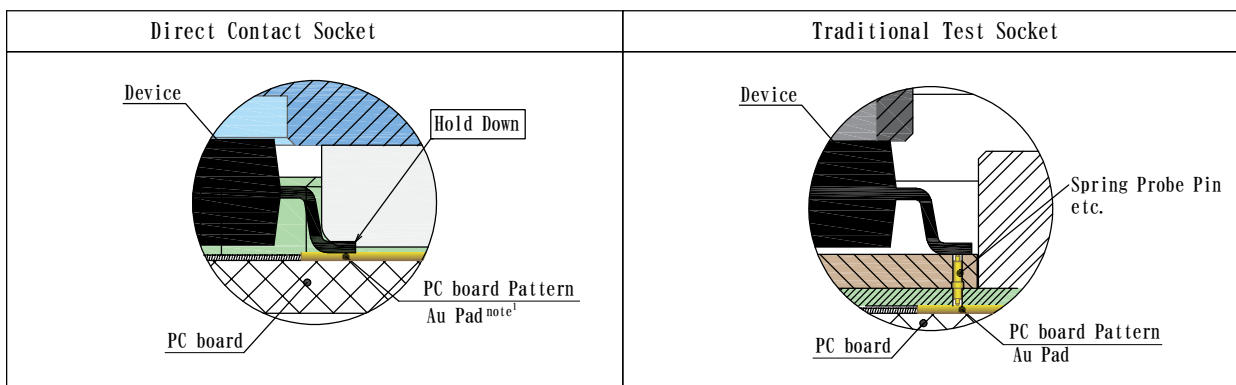
□40mm/1.57" max
(Body Size)



Please contact us for bigger size.

Features :

- Since the general IC socket has terminals (spring probe, plate vane, etc.) between the board and the device, the number of contacts are increases, and signal would occurs deterioration or attenuation, but this socket is in a state close to soldering. It's the ideal for evaluating high-speed IC devices because it suppresses the deterioration of the signal.
- 「Latch Lock type」 and 「Screw Lock type」 are available.
As the lid of the Latch Lock type could be attached and detached with One-Touch, so the device could be measured quickly.
The Screw Lock type could be installed by fixing the screws in 4 places, and the measurement is ready without any hassle.



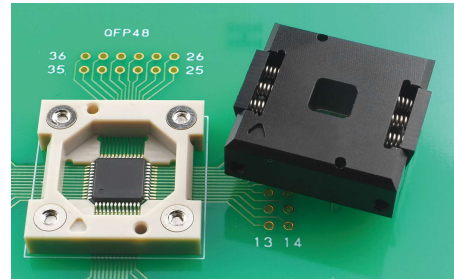
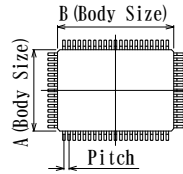
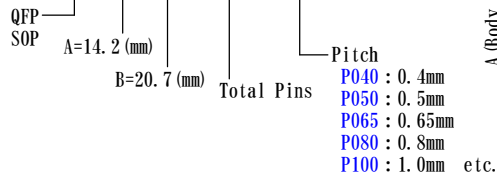
note¹ Pad cleaning is required after mounting the socket and measuring.

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Latch Lock type

How to order

DCL-QFP 142 207- 128 - P050

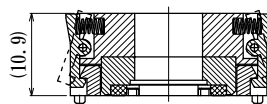
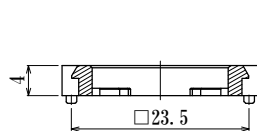
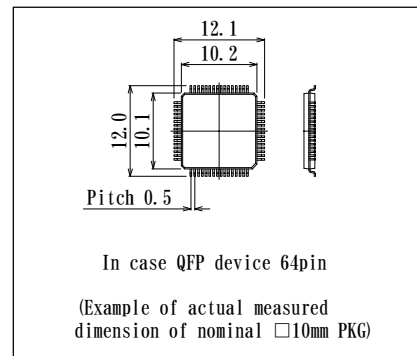
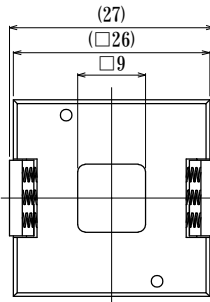
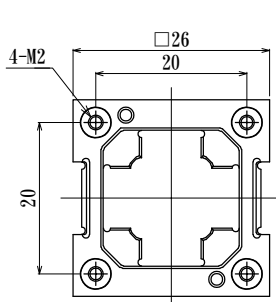


Important :

The differences of dimensions A and B depending on the package manufacturer, so please send the device sample in advance.

Example)

DCL-QFP101102-064-P050



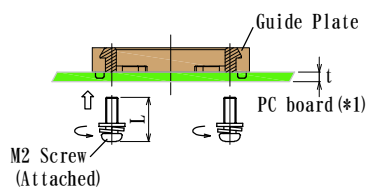
Latch Lock

Devices could be installed/prepared for measurement, and removed relatively easily.

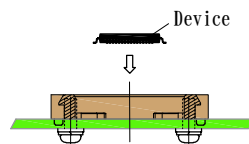
Guide Plate

Lid Attached

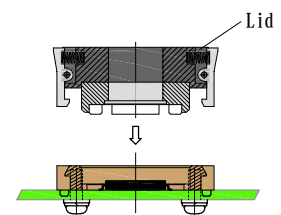
How to use



①Place the guide plate on the board and fix it with four screws from bottom. (*2)



②Set the device along the guide plate. (After setting, make sure that the device-lead is on the board pattern.)



③After fixing the latch lock to the guide plate, the preparation for the measurement is ready.

PC Board Thickness	t	1.6	2.0	4.0
M2 Screw Length	L	6	8	

(Reference)
M2 Screw Tightening Torque : 8.8cN·m

*1 We also accept PC board production. Please contact us.

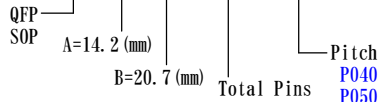
*2 Please refer to Page 2A32 for Torque Screwdriver (Option)

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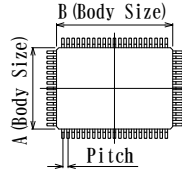
Screw Lock type

How to order

DCS-QFP 142 207-128-P050



Pitch
P040 : 0.4mm
P050 : 0.5mm
P065 : 0.65mm
P080 : 0.8mm
P100 : 1.0mm etc.

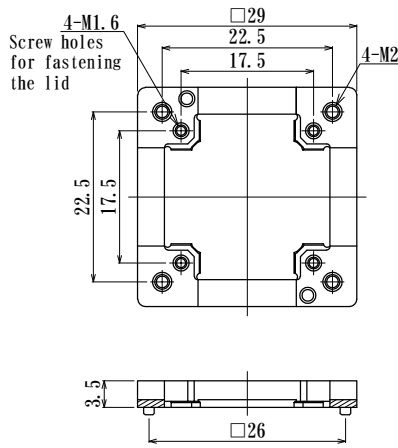


Important)

The differences of dimensions A and B depending on the package manufacturer, so please send the device sample in advance.

Example)

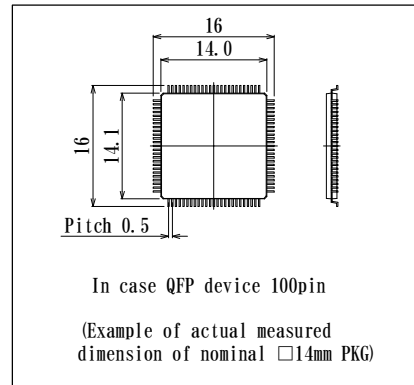
DCS-QFP141140-100-P050



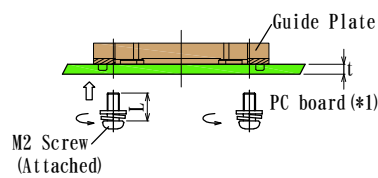
Guide Plate

Lid Attached

By tightening the hex screw, the device is installed and ready for measurement. It's suitable for evaluation when you want to reduce the height of the socket.



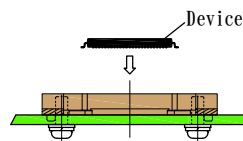
How to use



①Place the guide plate on the board and fix it with screws from bottom. (*2)

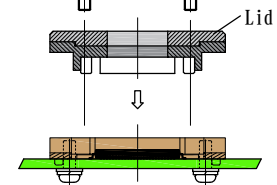
PC board thickness t	1.6	2.0	4.0
M2 Screw Length L	5	8	

(Reference)
M2 Screw Tightening Torque : 8.8cN·m

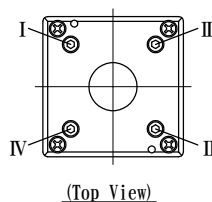


②Set the device along the guide plate. (After setting, make sure that the device-lead is on the board pattern.)

M1.6 Hex Socket Screw (Attached)



③Place the lid on the guide plate and fix it with screws from top to prepare for measurement. (*2)



We recommend diagonal tightening when fastening the screw. Please also tighten evenly in about 3 times, so that one of the screw would not be torqued extremely. (*2)

I → II → III → IV → I → II → III → IV → I → II → III → IV

*1 We also accept board production. Please contact us.

*2 Please refer to Page 2A32 for Torque Screwdriver (Option)

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mm

PCB Layout																																			
<p style="text-align: center;">PCB Pattern (Top View)</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Device Size</th> <th>Pin No.</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>□10</td> <td>64</td> <td>10.6</td> <td>18.4</td> <td>20.0</td> <td>23.5</td> </tr> <tr> <td>□12</td> <td>80</td> <td>(12.6)</td> <td>(19.0)</td> <td>20.5</td> <td>24.0</td> </tr> <tr> <td>□14</td> <td>100</td> <td>(14.6)</td> <td>(21.0)</td> <td>22.5</td> <td>26.0</td> </tr> <tr> <td>□20</td> <td>144</td> <td>(20.6)</td> <td>(29.5)</td> <td>31.0</td> <td>35.0</td> </tr> </tbody> </table> <p style="text-align: center; font-size: small;">The stated dimensions are for 0.5 mm pitch. Please contact us for other pitches and details.</p> <p style="text-align: center; font-size: x-small;"> Pattern Prohibition Area Parts Mount Height 0.8mm max Area </p>					Device Size	Pin No.	A	B	C	D	□10	64	10.6	18.4	20.0	23.5	□12	80	(12.6)	(19.0)	20.5	24.0	□14	100	(14.6)	(21.0)	22.5	26.0	□20	144	(20.6)	(29.5)	31.0	35.0
Device Size	Pin No.	A	B	C	D																														
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□14	100	(14.6)	(21.0)	22.5	26.0																														
□20	144	(20.6)	(29.5)	31.0	35.0																														
Reinforce plate (Option)																																			
<p>To ensure the strength of the board, and when the board is thin, it might be more appropriate to use a reinforce plate to straighten the board. Please contact us for more details.</p>																																			
Torque Screwdriver (Option)																																			
<p style="text-align: center;">Bits are included.</p>		<p>Rotary Slip Model Torque Screwdriver from TOHNICHI Mfg. Co., Ltd. It would be rotary slip when reached the set torque value, it prevents damage to the socket and screws without further tightening.</p>																																	
Socket Type	Usage Screws	Torque Screwdriver P/N	Bit Tip Shape																																
Latch Lock type (2A30)	M2 (PCB)	RTD30CN-B-1	Cross (+)																																
Screw Lock type (2A31)	M2 (PCB)	RTD15CN-B-W1.5	Hex																																
	M1.6 (Lid)																																		
<p>Note)</p> <ul style="list-style-type: none"> • For proper torque management the regular inspection is required. • The recommended torque value depends on the device type, number of poles, and pitch. Please contact us for more details. 																																			

We welcome your specific custom designs socket. Contact us for more details.