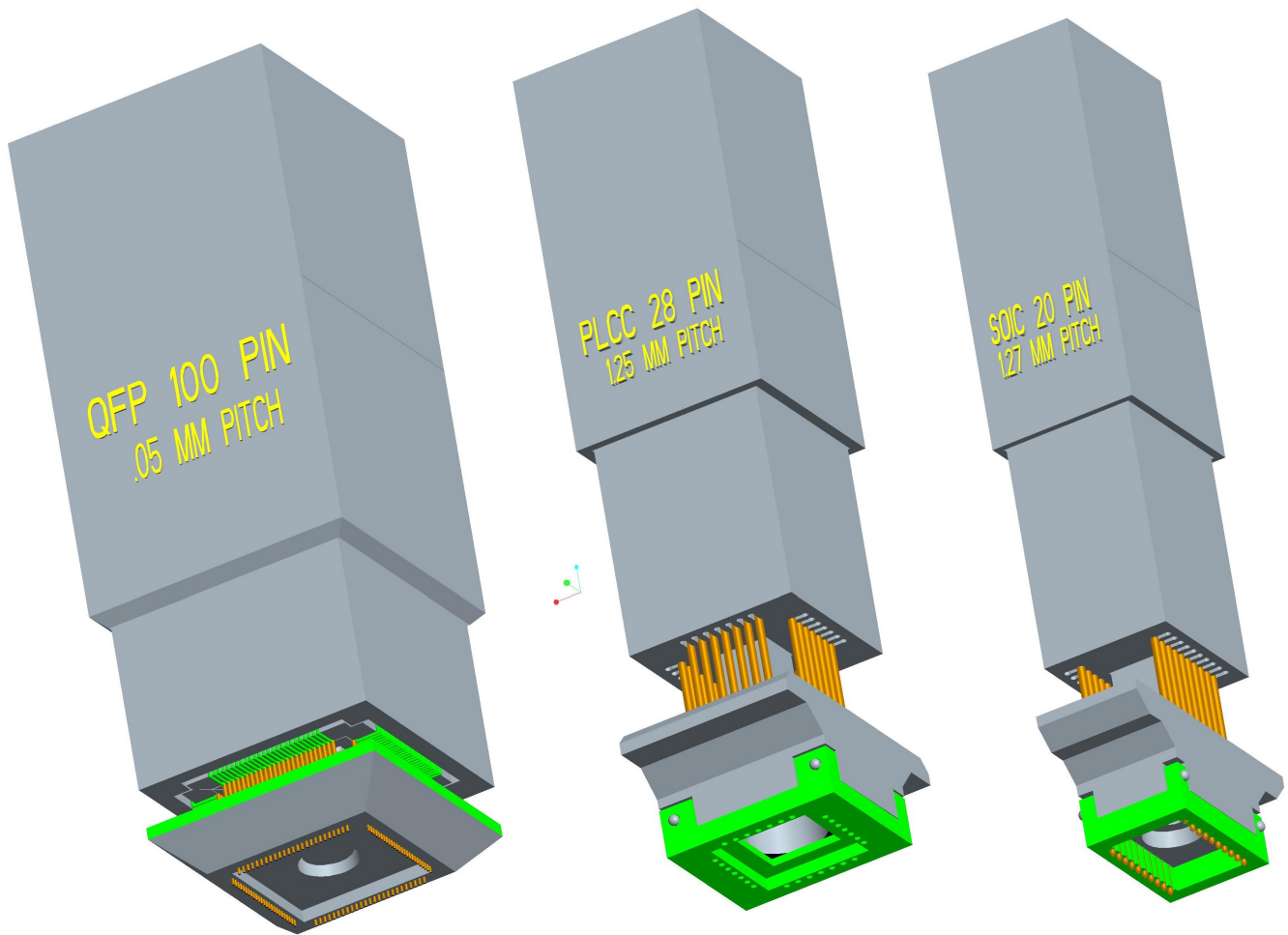


SMD Lightning Probe Systems information



SMD TEST PROBES:

- 1) Provides a means of in circuit testing for high density surface mount devices (SMD)
- 2) Easily perform power on and power off testing of SMD's.
- 3) Test the SMD's without the requirement to remove conformal coating.
- 4) Get positive connectivity of each leg of the SMD connected to the test equipment.
- 5) Fast set up and preparation time to begin testing.
- 6) The spring loaded pins are replaceable if required.
- 7) All the SMD test probes can be operated by hand or with our gantry hold down fixture.
(Reference brochure containing the gantry specifications.)

8) SMD pitch availability,

.1"

.05"

.025"

.05mm

.4mm

.8mm

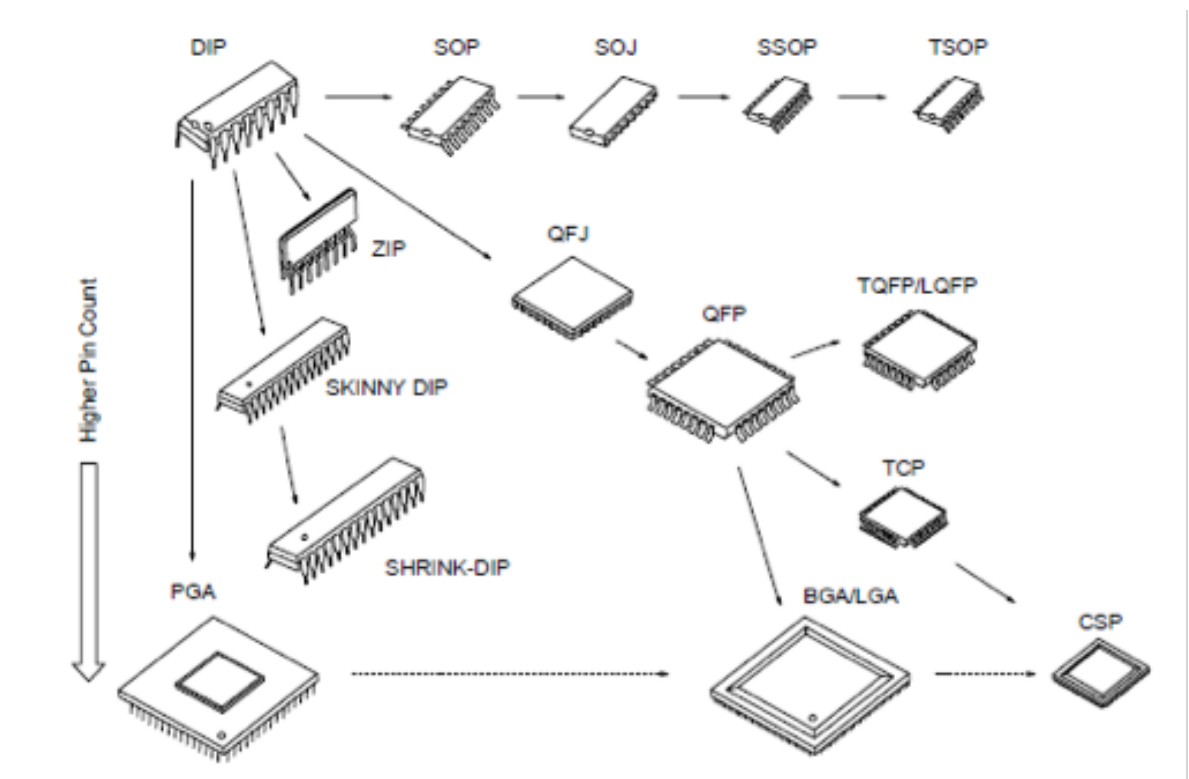
.5mm

.65mm

Any custom pitch size that may be required

Test interface probes available to test the following SMD package types;

BQFP
CDF
CERAMIC BRAZED
CQFP
CSOP
HDPGA
HTSSOP-20
HYSOIC
LCC
LQFP
PGA
PLCC
PQFP
QFP
QVSOP
S-PQFP
SOC
SOIC
SSOP
TQFP
TSOP
TSOP(1)
TSOP(2)
FLGA
SOJ



The SMD test interface probes are designed to probe simultaneously the leads of a SMD device, that is soldered on the circuit card to provide in circuit test capabilities.

They can be terminated with what ever the user will need to interface with their equipment;

IE D sub Connectors, or in line header connectors either plug or socket.

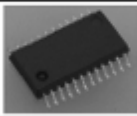
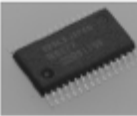




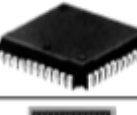
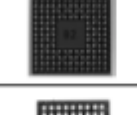
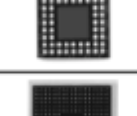

The SMD probes make electrical contact with the leads of the device by performing the following actions.

- 1) Select the proper SMD test probe that fits the SMD to be tested.
- 2) Connect the probe connectors to the desired equipment.
- 3) Locate the SMD on the circuit card to be tested.
- 4) Ensure that all the pins on the probe are fully retracted.
- 5) Alignment: Carefully align the precision fit bottom of the probe to where it is fitted properly to the body of the SMD. Use little force when doing this and ensure the probe is properly fit in X and Y axis of the embodiment of the IC. Once this is achieved ensure that the probe is level.
- 6) Gently apply a downward pressure to the probe upper cap. (The microprobes installed in the probe will then self align to each of the legs on the SMD and make good electrical connectivity.)

Once this is performed then the test can be commenced. Recommended that use of the gantry be used to give the technician the ability to operate the equipment that is interfaced to the SMD.

Features:

- 1) Each probe provides a great combination of reliability, repeatability, serviceability and ease of use.
- 2) gives the ability to test SMD's in a high density environment with a small profile to avoid problems of other components surrounding the SMD being tested.
- 3) The contact pins can be replaced if worn or damaged
- 4) The body of the probe that holds the contact pins is spring loaded to provide automatic retraction of the pins and a stop limiter to ensure the probe pins retract to the proper level.

Type	Package Types		Package Symbol		Pin Count
			Old	New	
Surface Mounting Type	SOP		MS	MA	8, 16
			GS	MA	24, 28, 32, 40, 44
	SSOP		MS	MB	20
			GS	MB	30, 32, 60, 64, 70
			GS-B	MB	60
	TSOP(1)		TS	TA	32, 40* ¹
	TSOP(2)				26/20, 26/24, 28/24, 28, 32, 44/40, 44, 48, 50/44, 50, 54, 66* ¹ , 70/64, 70, 86* ¹
	QFP		GS	GA	44, 56, 64, 80, 100, 128, 160, 208, 240, 272, 304
			GS-2	GA	44, 56
			GS-B	GA	64, 80, 100
	High Heat Dissipation QFP* ²		GS-C	GA	208
	TQFP		TS	TB	44, 48, 64, 80, 100, 120
	LQFP		GS	TC	144, 176, 208
	SOJ		JS (SJ)	JA	26/20, 26/24, 28/24, 28, 32, 36, 40, 42, 50
	QFJ (PLCC)		JS	JB	18, 20, 22, 28, 32, 44, 68, 84
	BGA/FBGA		LS	LA	48, 84, 104, 144, 176, 224, 256, 352, 420, 560
FLGA		—	LB	49, 56, 84	
Wafer Level CSP (W-CSP)		—	HA, HB	Custom design	

