

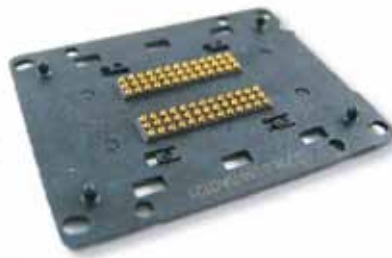
# Memory Testing

Memory ICs are a core component of nearly every electronic device. Memory ICs are usually categorized in volatile and non-volatile memory where volatile memory keeps its stored information when the power cycle is interrupted and volatile memory needs a constant power supply to retain its data. Most memory modules have a standardized format which can be tested with standardized test-pins. C.C.P. offers testing solutions for all common formats (DDR, Flash, eMCP, etc.) as well as customized testing solutions for your individual needs.

## Design Concept



DDR2/3 Socket



DDR3/4 Socket



eMCP Socket

Housing	Material
Injection molding	PES

Housing	SPEC
Min. Pitch	0.4mm



Manual DDR2/3 Testing Module  
Single Side



Manual DDR3 Testing Module  
Double Side

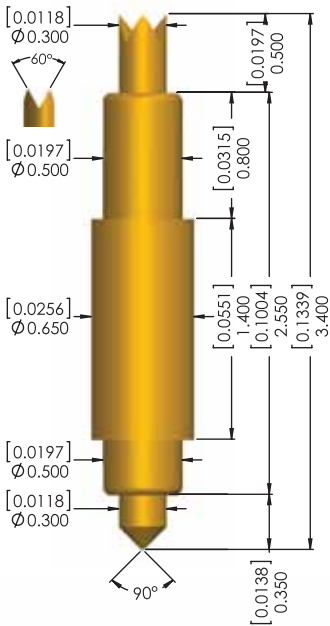
ManualDDR2/3 Testing Module	SPEC
Max. Site Amount	8~16 (Single side/ Double side)
Transmission Rate (MT/s)	200MHz~1866MHz

# Probe Specification

Unit:mm; [ ]:in

## DE2-050EF25-120

DDR  
2/3



### Material

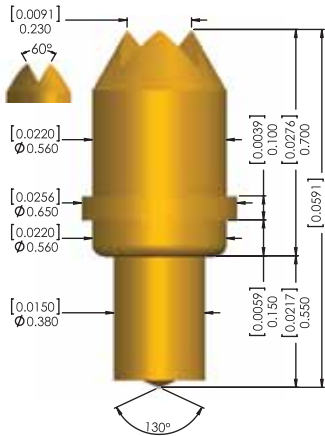
Top Plunger  
BeCu, Au plated  
Barrel  
Brass, Au plated  
Spring  
SUS, Au plated  
Bottom plunger  
BeCu, Au plated

### Mechanical Spec.

Recommended travel  
0.40mm  
Full travel  
0.60mm  
Spring force  
35g±20%@0.40mm  
Operating Temp.  
-55°C~150°C

## DE4-056EF09-03F0

DDR3



### Material

Barrel  
BeCu, Au plated  
Spring  
SUS, Au plated  
Bottom plunger  
BeCu, Au plated

### Mechanical Spec.

Recommended travel  
0.40mm  
Full travel  
0.50mm  
Spring force  
30g±20%@0.40mm  
Operating Temp.  
-55°C~150°C

### Electrical Spec.



Pitch: 0.8mm Socket Material: Peek 1000

Current rating 1A continuous  
Contact Resistance <175mΩ(AVG)  
Characteristic impedance 37Ω  
Insertion loss -1dB@18.6GHz  
Return loss -20dB@2.69GHz  
Time delay 20.4 psec  
Loop inductance 0.76 nH  
Capacitance 0.55 pF

### Electrical Spec.



Pitch: 0.8mm Socket Material: Peek 1000

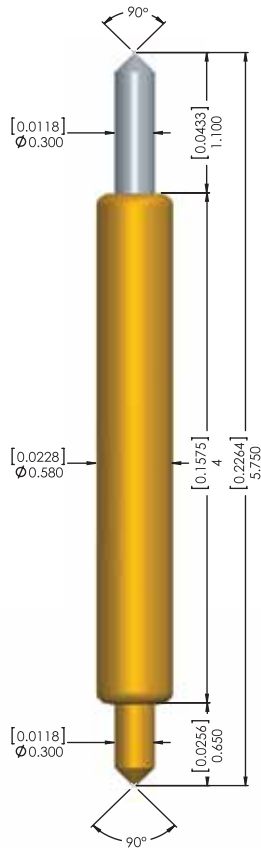
Current rating 1A continuous  
Contact Resistance <75mΩ(AVG)  
Characteristic impedance 36.16 Ω  
Insertion loss -1dB>20GHz  
Return loss -20dB@5.11GHz  
Time delay 9.4psec  
Loop inductance 0.34nH  
Capacitance 0.26pF

# Probe Specification

Unit:mm; [ ]:in

## PE1-058EE40-01A0

Flash



### Material

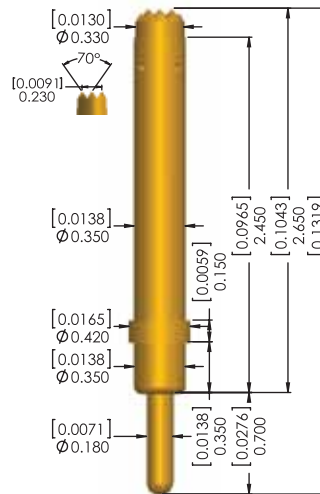
Top Plunger  
Pd alloy  
Barrel  
PhBz, Au plated  
Spring  
SUS, Au plated  
Bottom plunger  
BeCu, Au plated

### Mechanical Spec.

Recommended travel  
0.80mm  
Full travel  
1.1mm  
Spring force  
28g±20%@0.80mm  
Operating Temp.  
-55°C~150°C

## DE4-035DH24-01A0

eMCP



### Material

Top Plunger  
BeCu, Au plated  
Barrel  
PhBz, Au plated  
Spring  
SWP, Au plated  
Bottom plunger  
BeCu, Au plated

### Mechanical Spec.

Recommended travel  
0.50mm  
Full travel  
0.70mm  
Spring force  
27g±20%@0.50mm  
Operating Temp.  
-15°C~125°C

### Electrical Spec.

Pitch: 0.8mm Socket Material: Peek 1000



Current rating 1A continuous  
Contact Resistance <75mΩ(AVG)  
Characteristic impedance 41.2Ω  
Insertion loss -1dB>20GHz  
Return loss -20dB@ 2.56GHz  
Time delay 32.2psec  
Loop inductance 1.33nH  
Capacitance 0.78pF

### Electrical Spec.

Pitch: 0.5mm Socket Material: Peek 1000



Current rating 1A continuous  
Contact Resistance <75mΩ(AVG)  
Characteristic impedance 40.06Ω  
Insertion loss -1dB>20GHz  
Return loss -20dB@4.5GHz  
Time delay 17.22 psec  
Loop inductance 0.69 nH  
Capacitance 0.43 pF