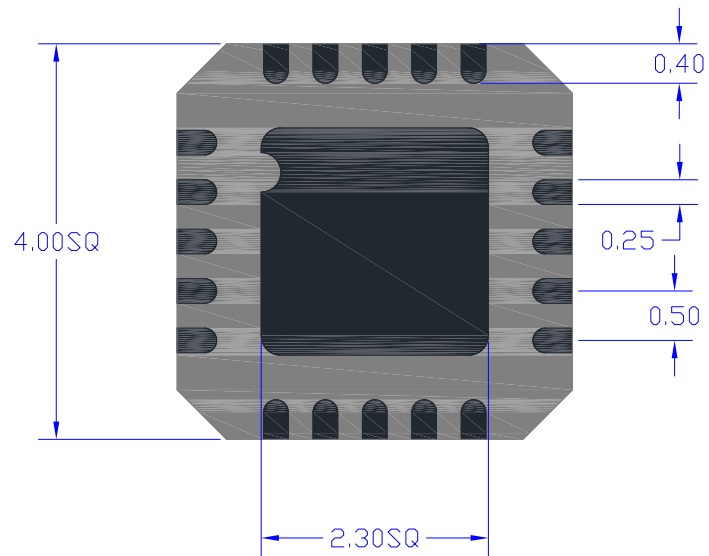
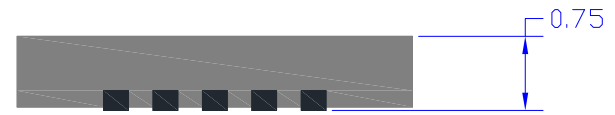
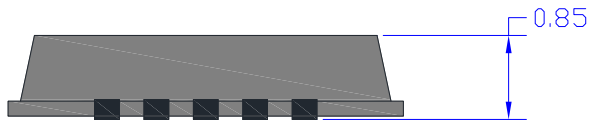


## Bill of Materials Change Description

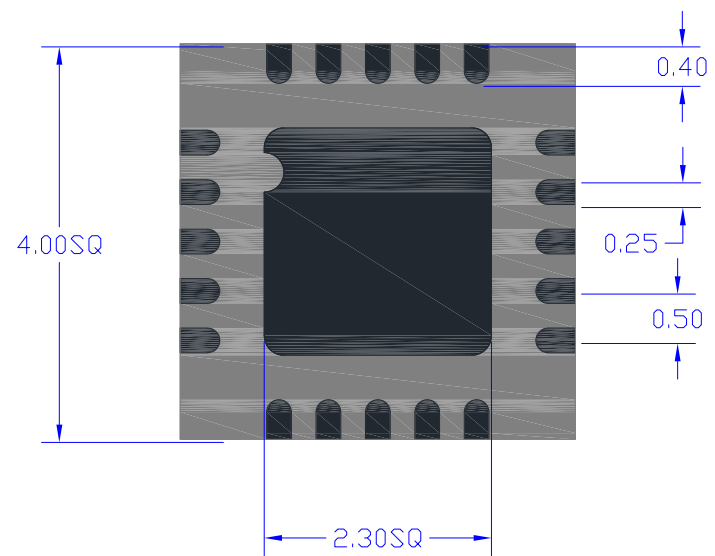
MATERIALS	FROM	TO	REMARKS
Die Attach	Ablestik 8290 / Ablestik 3230	Ablestik 8290 / Hitachi EN4900GC	Same / Qualified at receiving site
Wire type	Gold Wire	Gold Wire	Same
Mold Compound	Sumitomo G700E	Sumitomo G700 / Sumitomo G700LYT	Same base
Lead Finish	Matte Sn	Matte Sn	Same

# FOOTPRINT COMPARISON DRAWING

# 20LFCSP\_2.3EP - 4 x 4

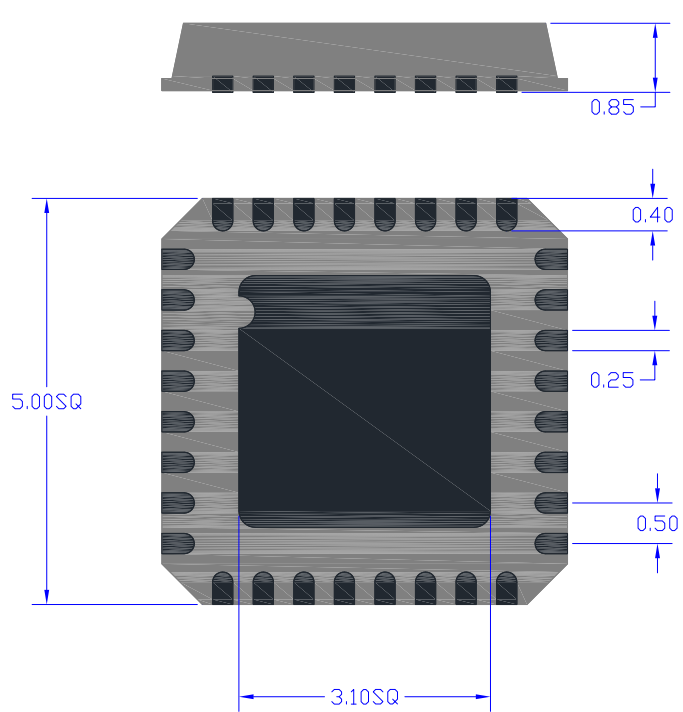


CP-24-2 - STA

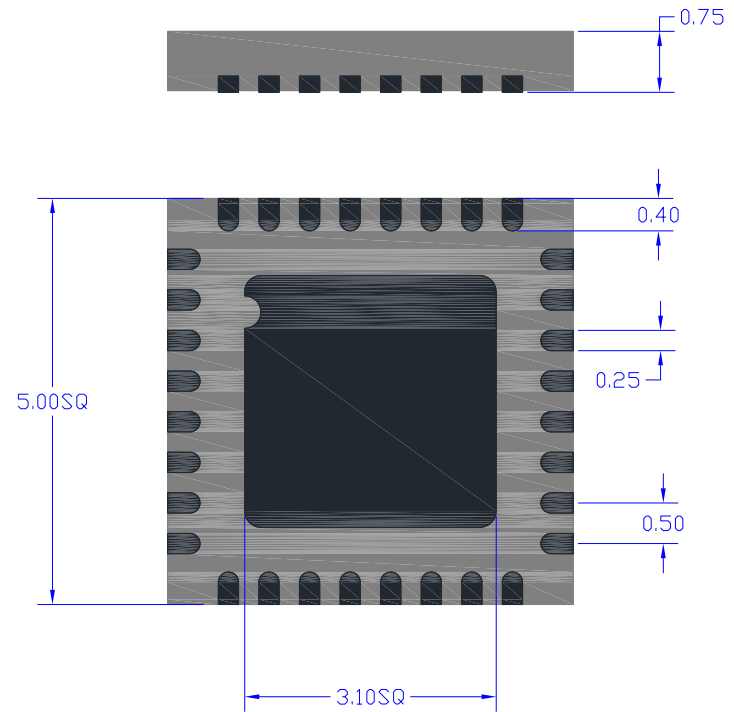


CP-24-14 - AEK

# 32LFCSP\_3.1EP – 5 x 5

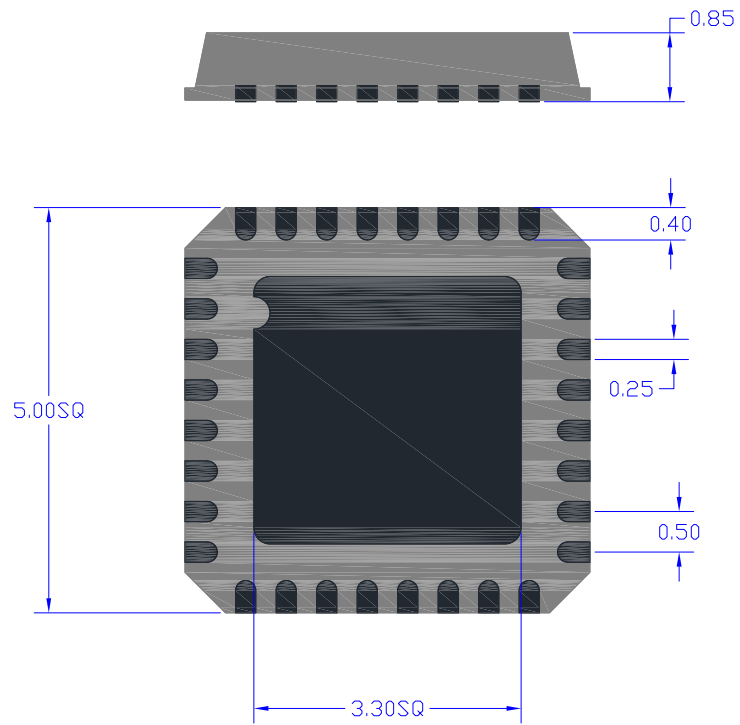


CP-32-2 - STA

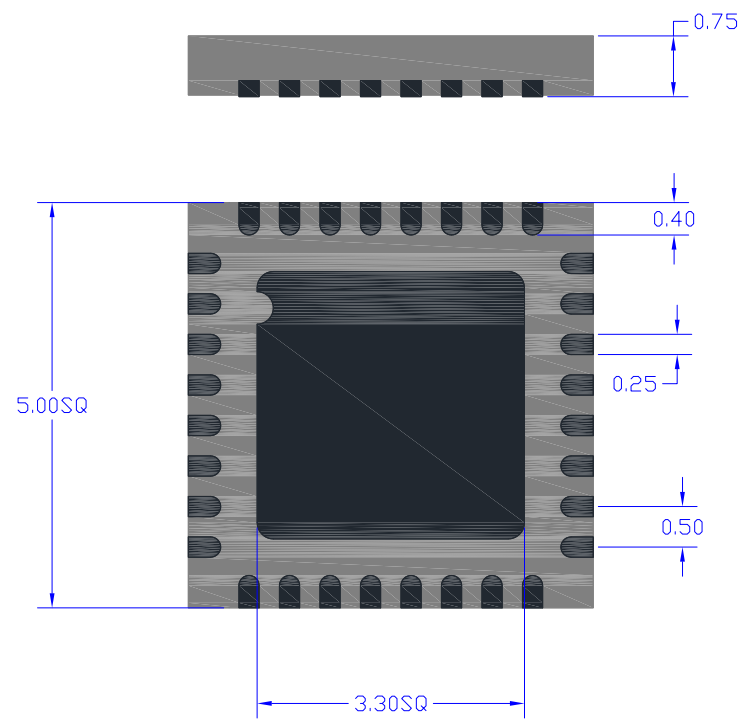


CP-32-7 - AEK

# 32LFCSP\_3.3EP – 5 x 5

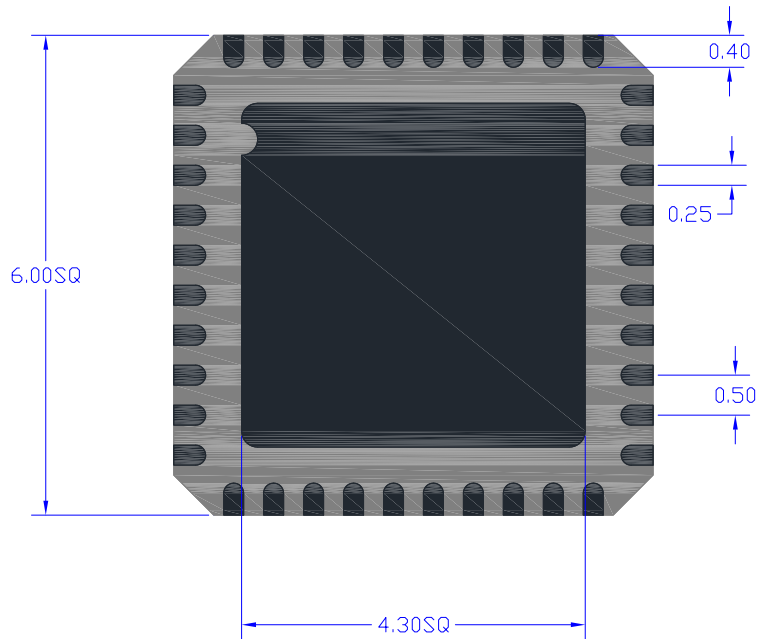
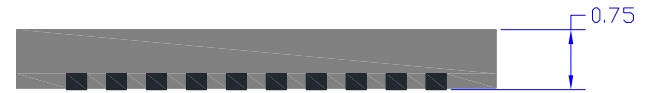
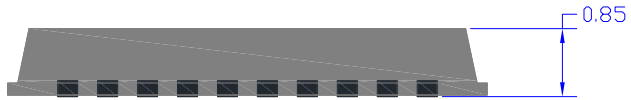


CP-32-3 - STA

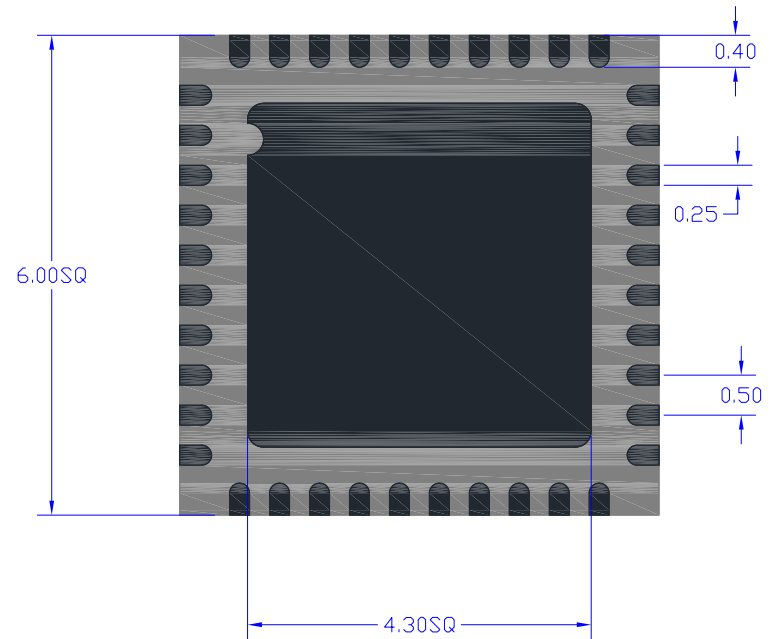


CP-32-13 - AEK

# 40LFCSP\_4.3EP – 6 x 6

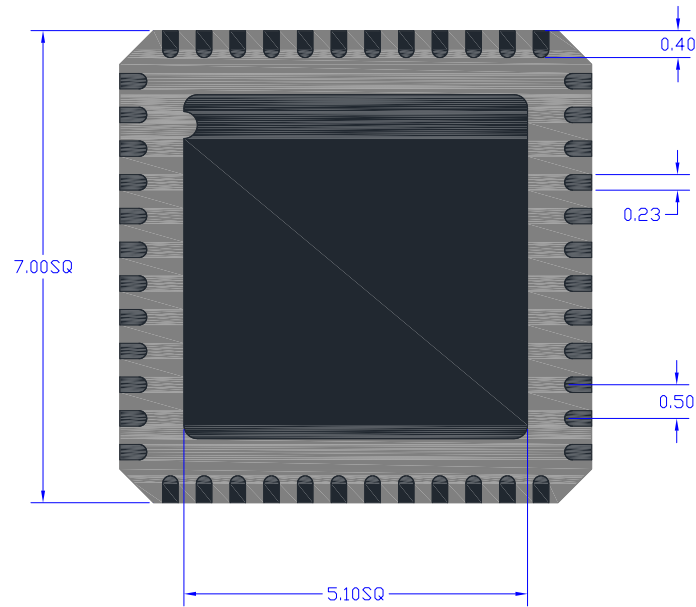
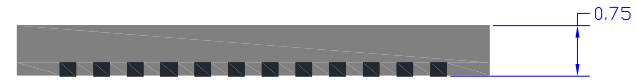
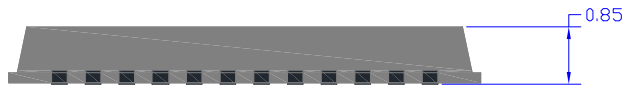


CP-40-4 - STA

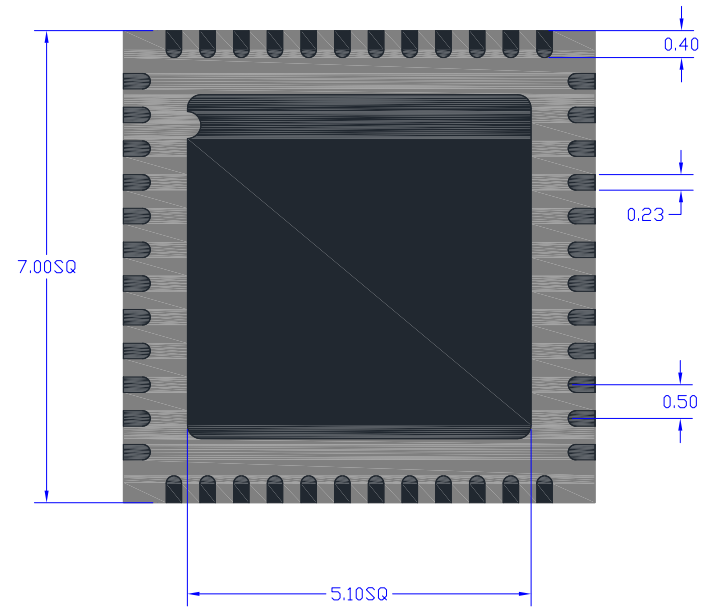


CP-40-10 - AEK

# 48LFCSP\_5.1EP - 7 x 7

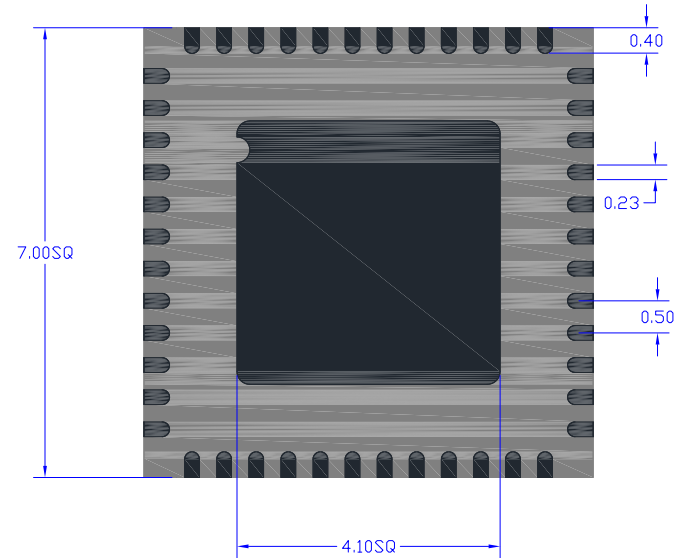
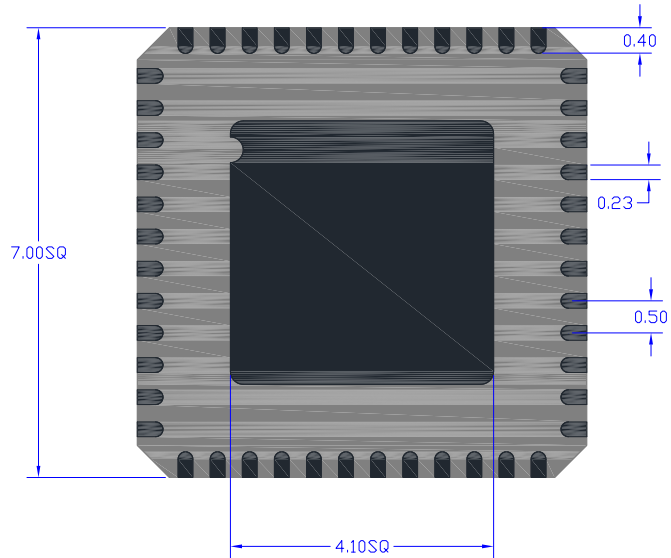
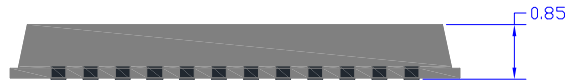


CP-48-1 - STA



CP-48-4 - AEK

# 48LFCSP\_4.1EP - 7 x 7

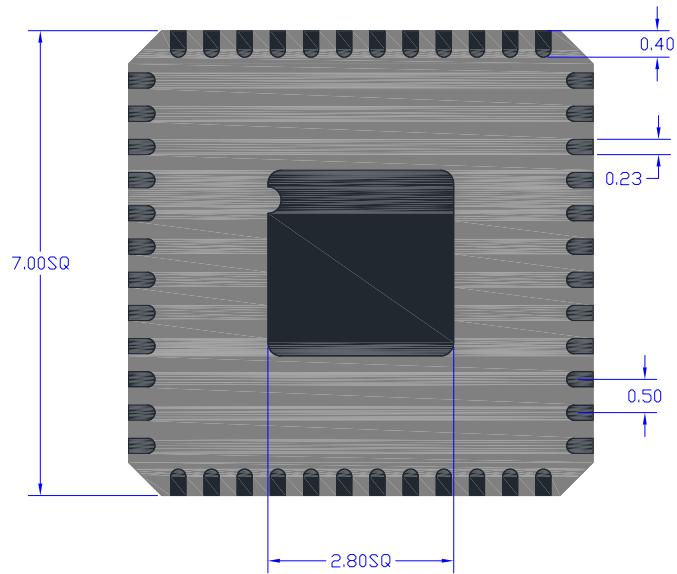
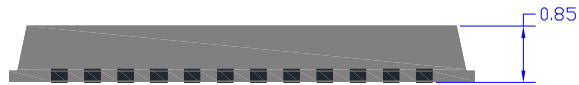


CP-48-3 - STA

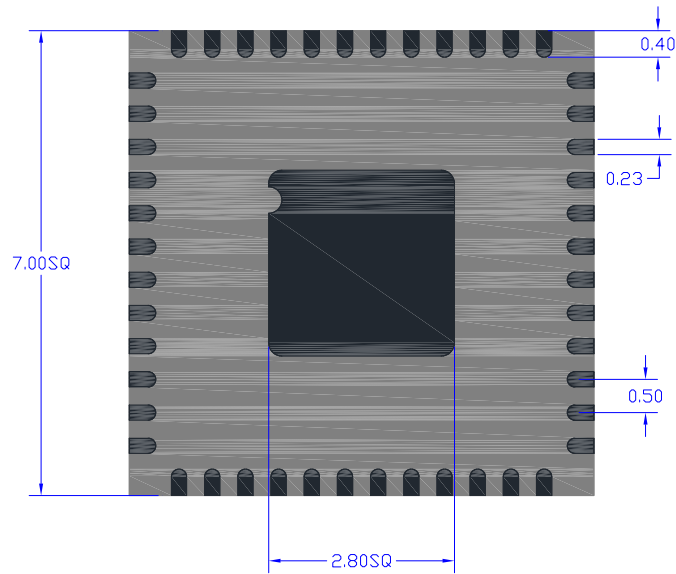
CP-48-5 - AEK



# 48LFCSP\_2.8EP - 7 x 7

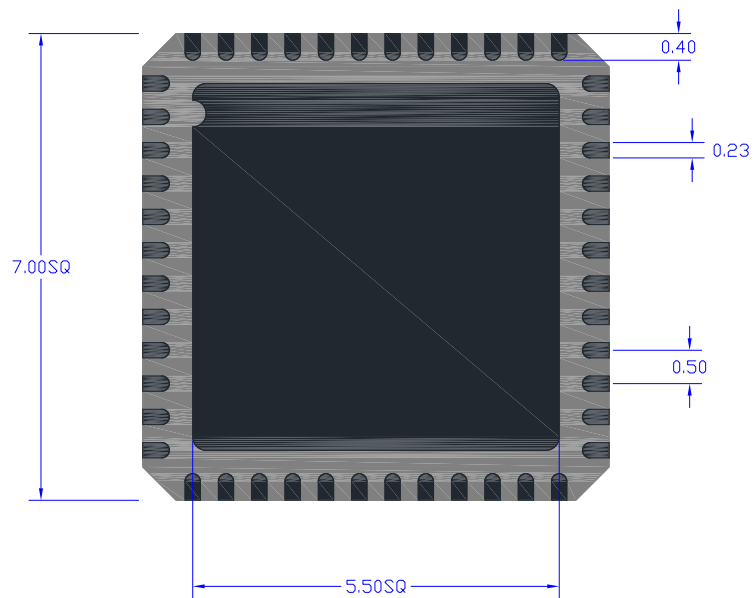


CP-48-6 - STA

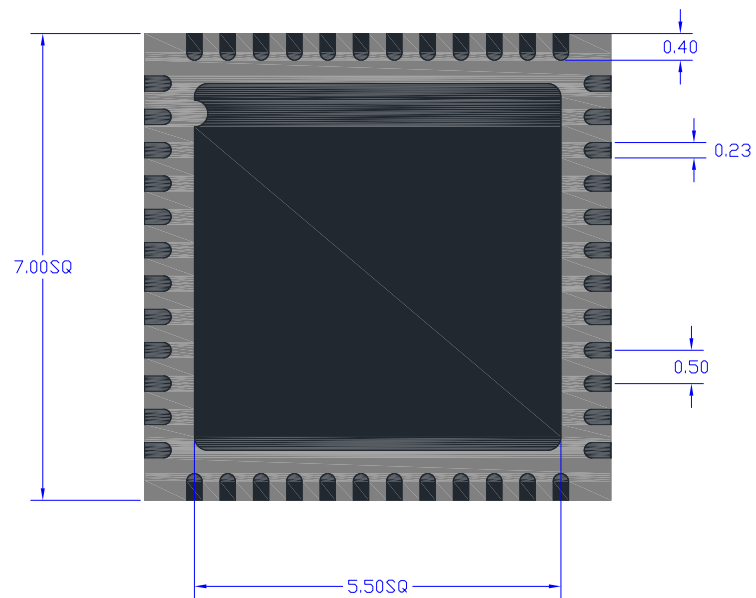


CP-48-21 - AEK

# 48LFCSP\_5.5EP - 7 x 7

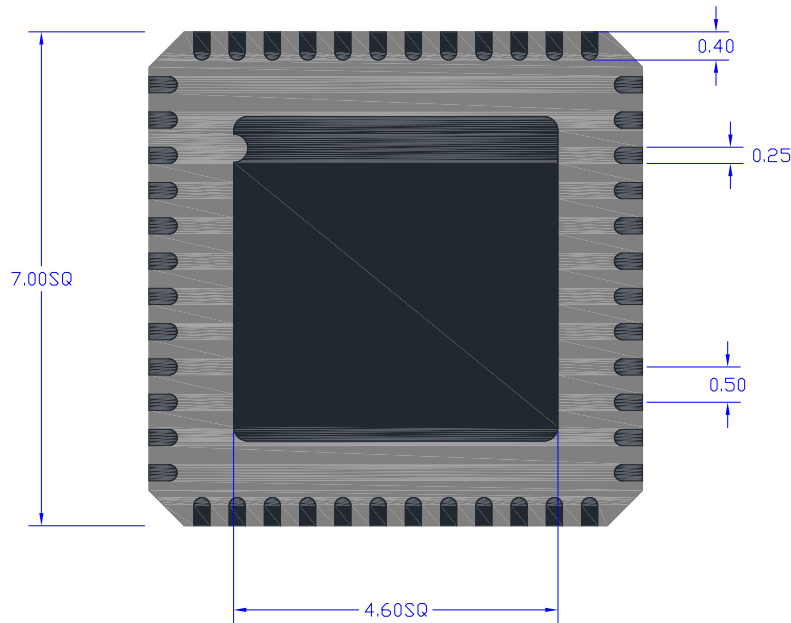


CP-48-8 - STA

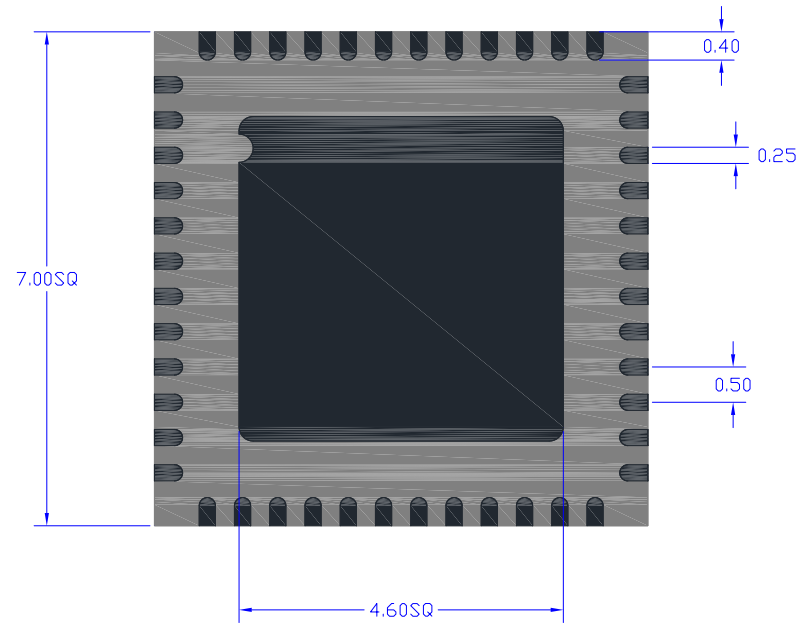


CP-48-9 - AEK

# 48LFCSP\_4.6EP - 7 x 7

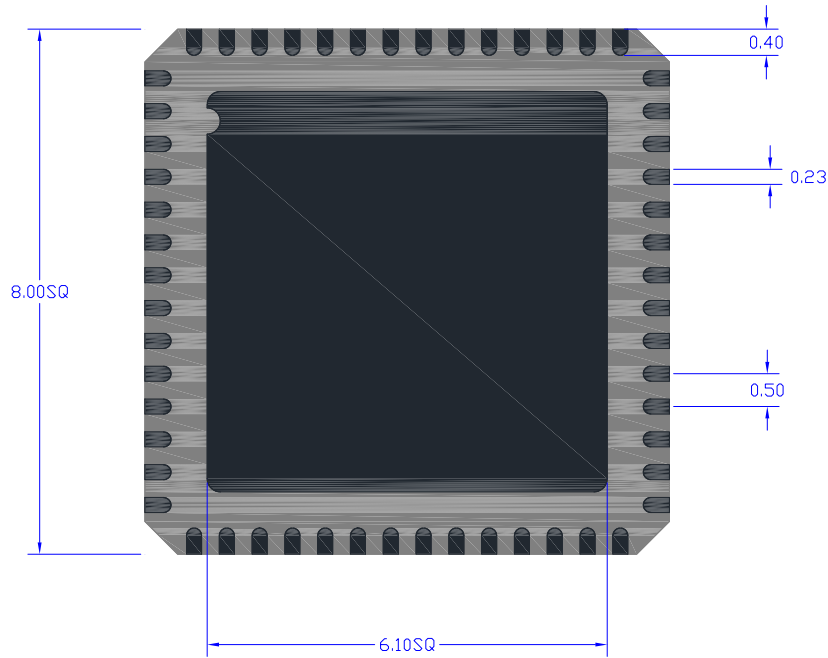
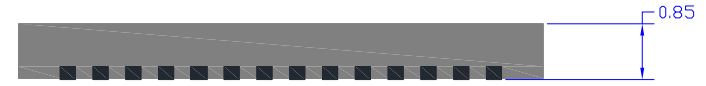


CP-48-12 - STA

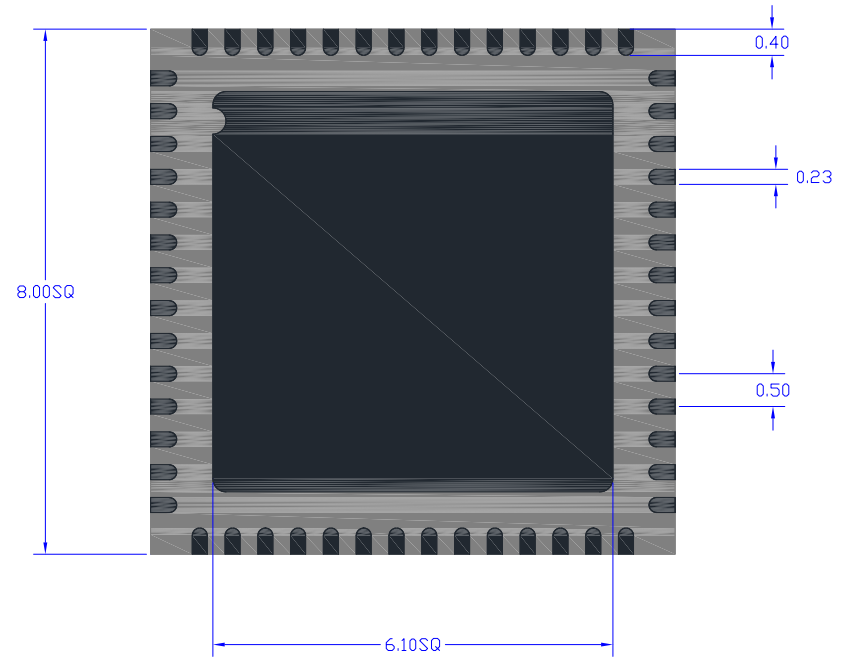


CP-48-14 - AEK

# 56LFCSP\_6.1EP – 8 x 8

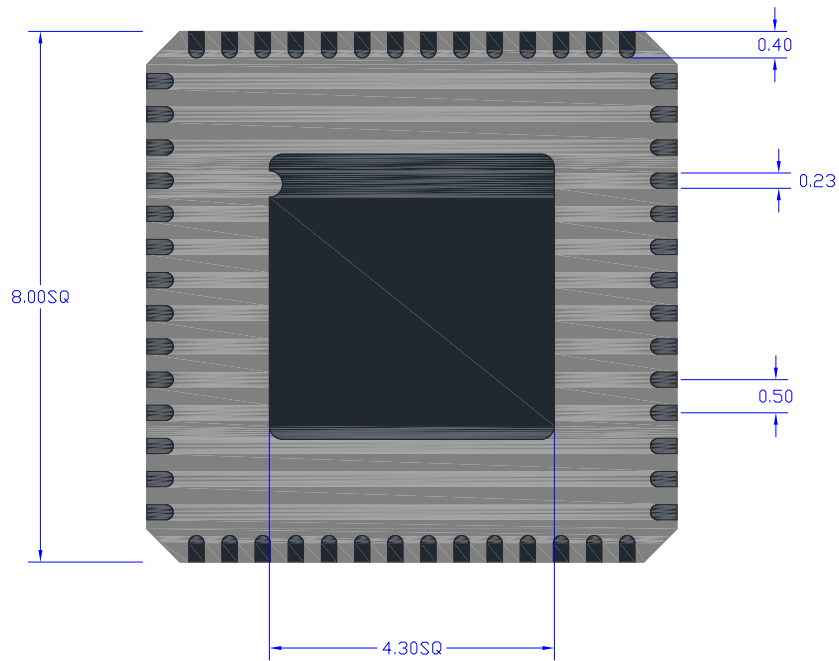


CP-56-1 - STA

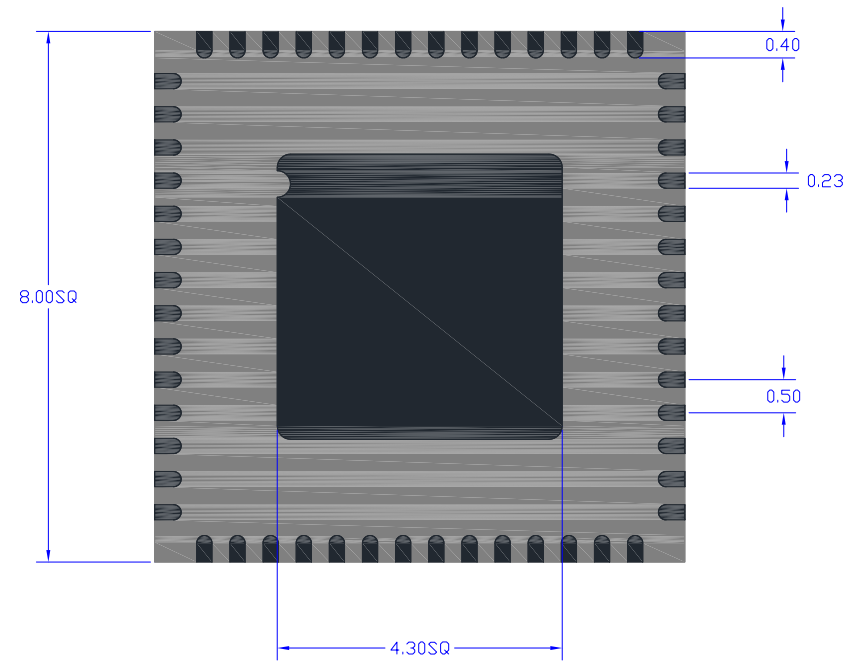


CP-56-11 - AEK

# 56LFCSP\_4.3EP - 8 x 8

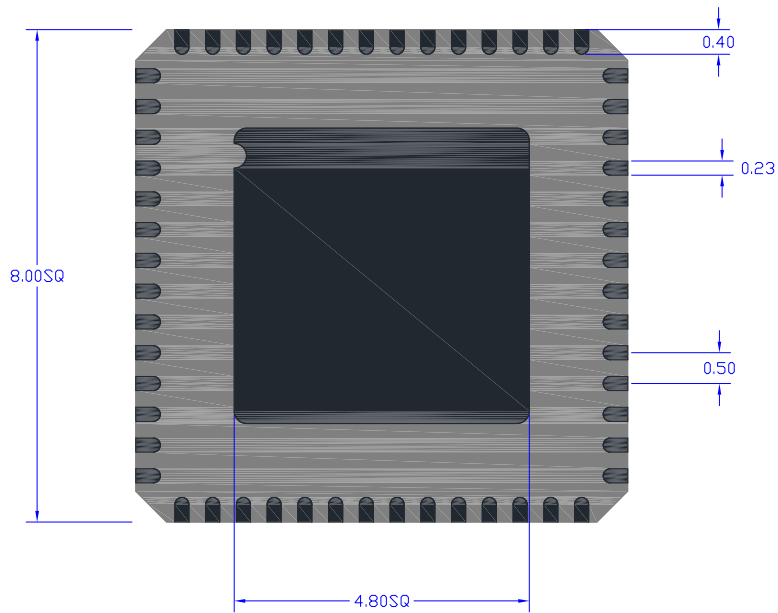


CP-56-2 - STA

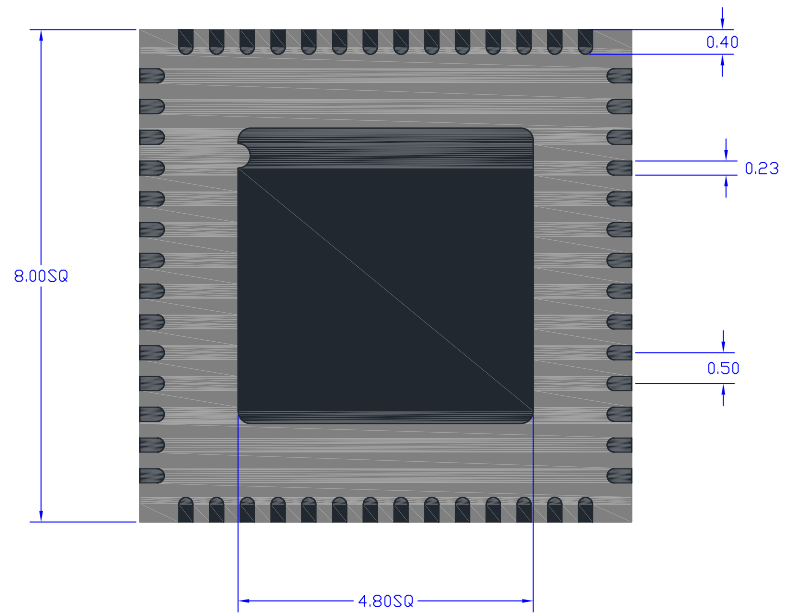


CP-56-17 - AEK

# 56LFCSP\_4.8EP - 8 x 8

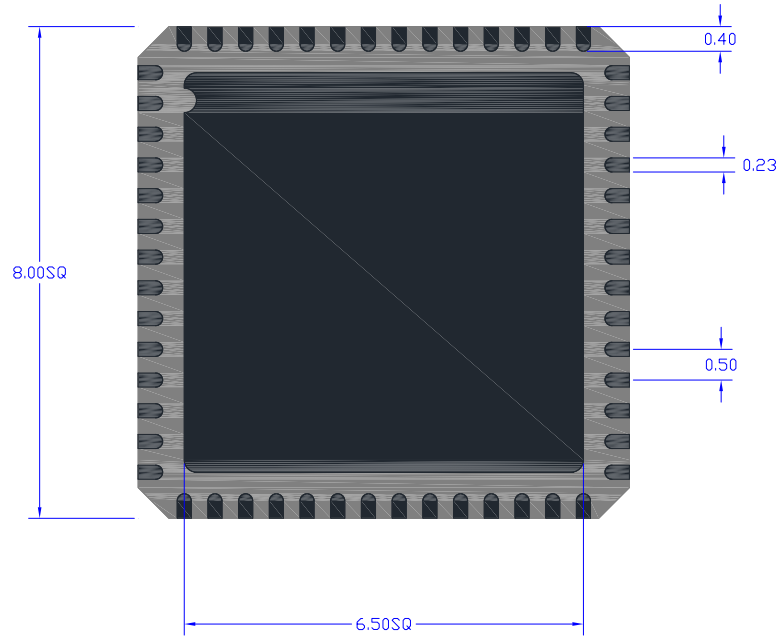


CP-56-3 - STA

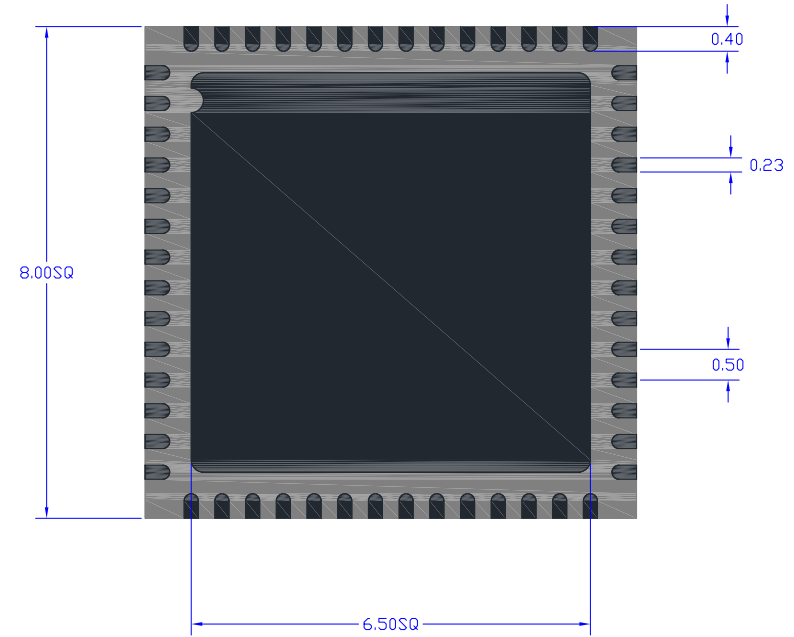


CP-56-18 - AEK

# 56LFCSP\_6.5EP - 8 x 8

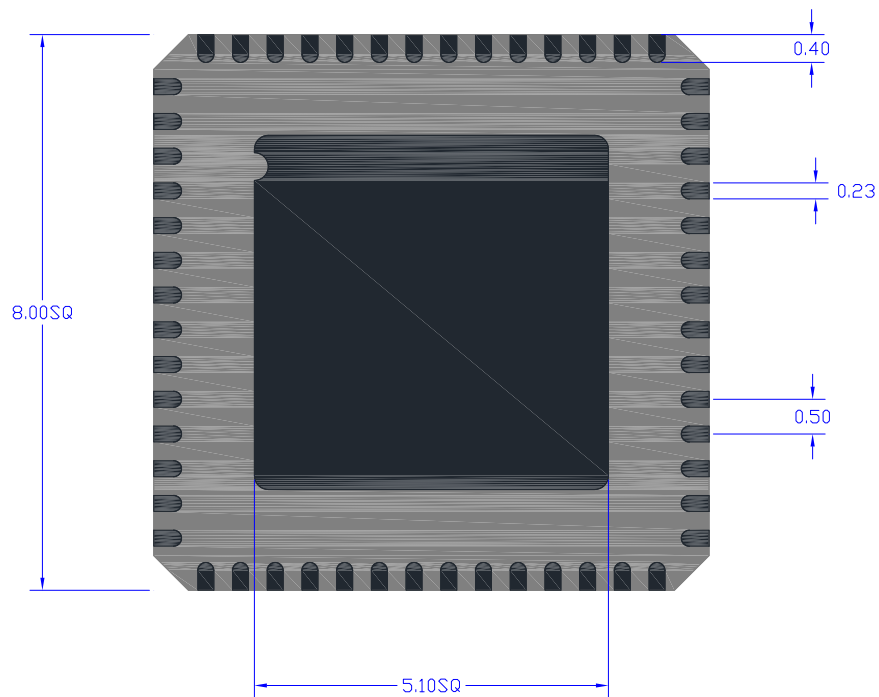


CP-56-4 - STA

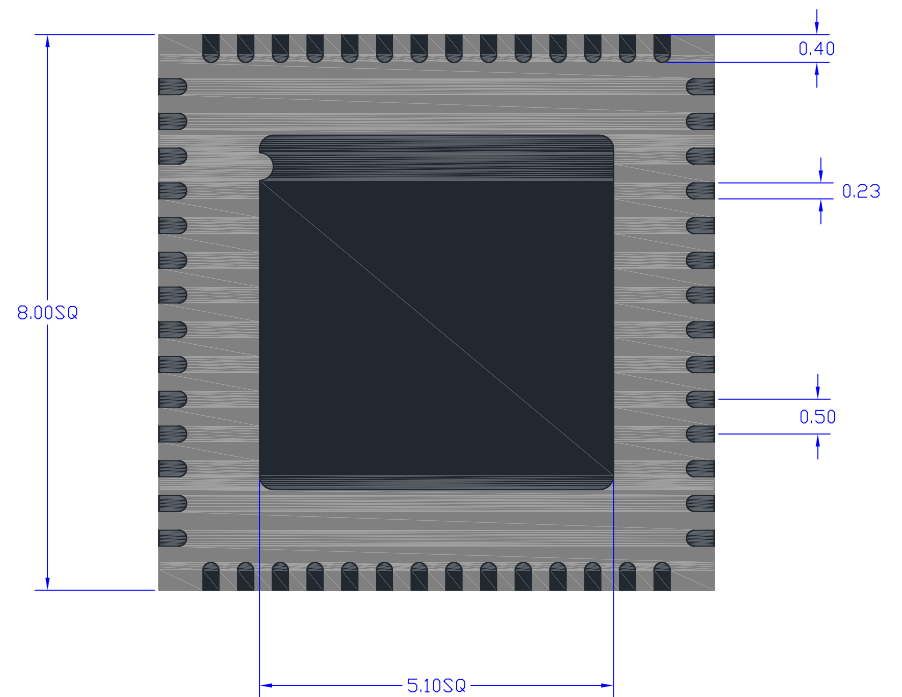


CP-56-19 - AEK

# 56LFCSP\_5.1EP - 8 x 8



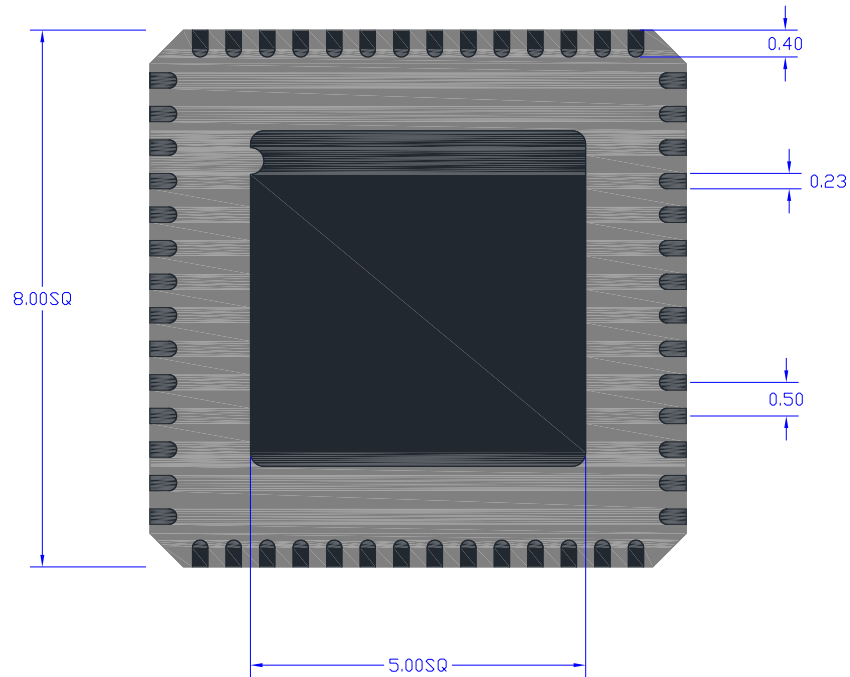
CP-56-5 - STA



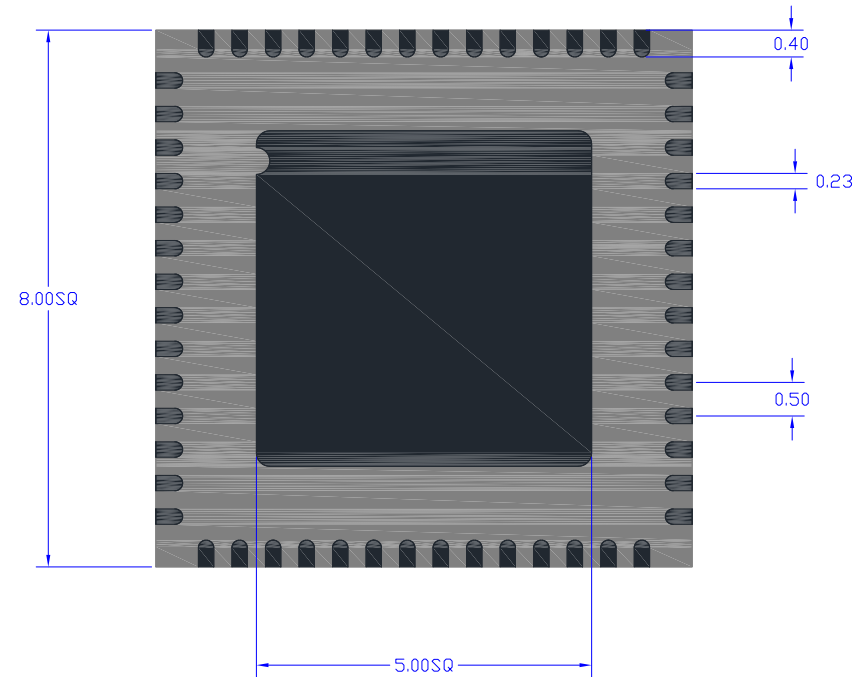
CP-56-20 - AEK



# 56LFCSP\_5.0EP – 8 x 8

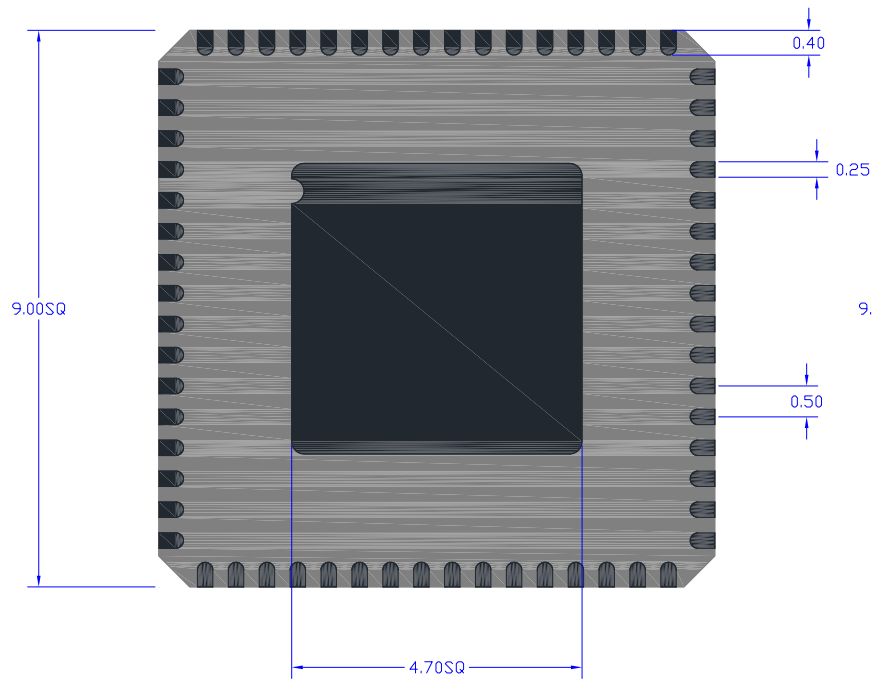


CP-56-5 - STA

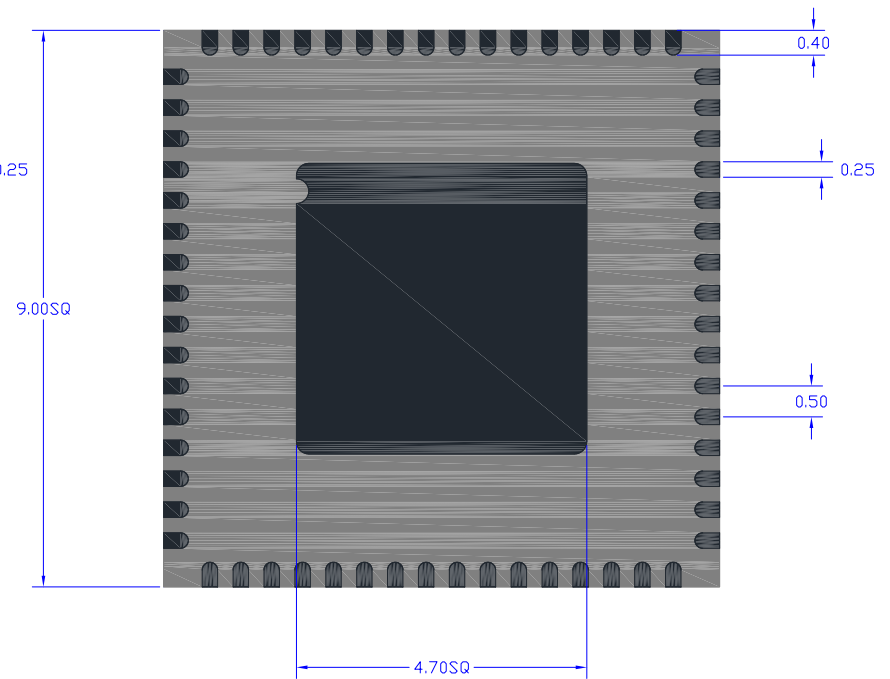


CP-56-21 - AEK

# 64LFCSP\_4.7EP - 9 x 9

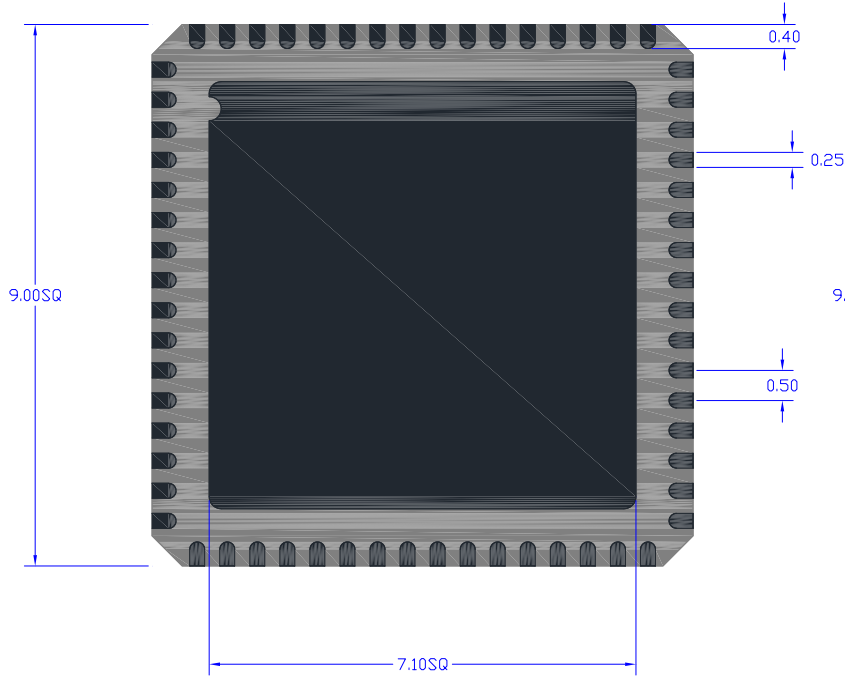


CP-64-1 - STA

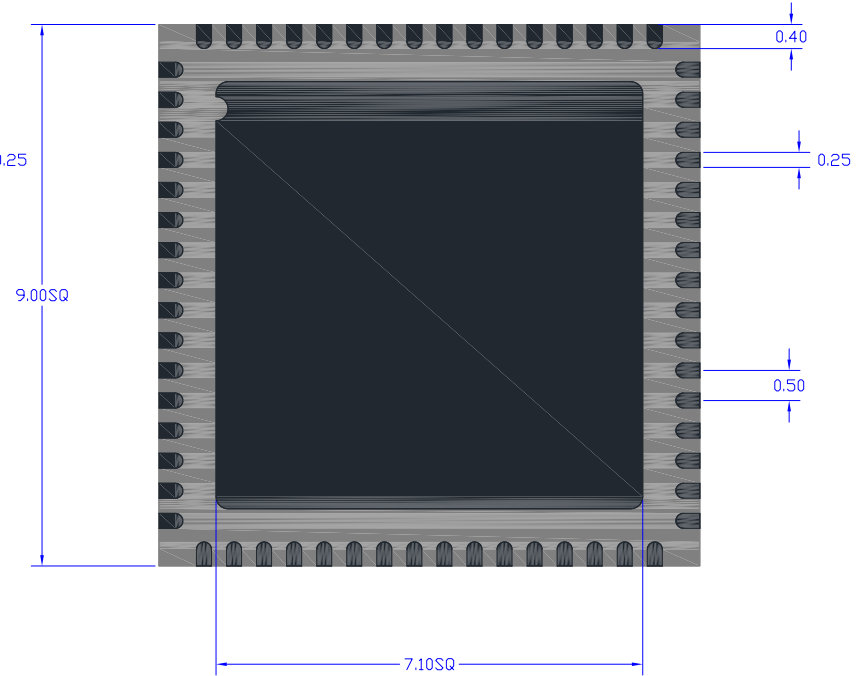


CP-64-21 - AEK

# 64LFCSP\_7.1EP - 9 x 9

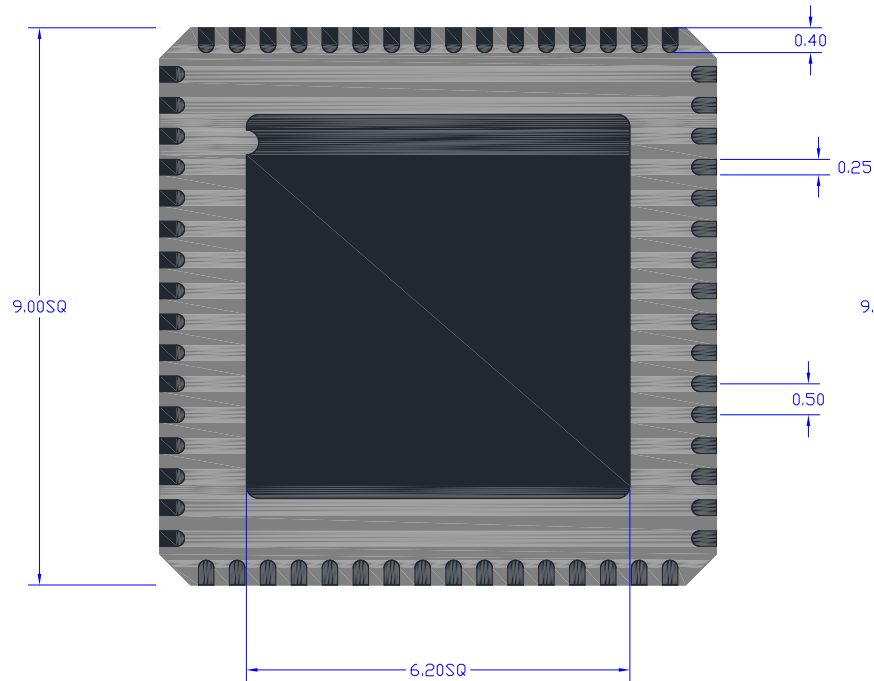


CP-64-3 - STA

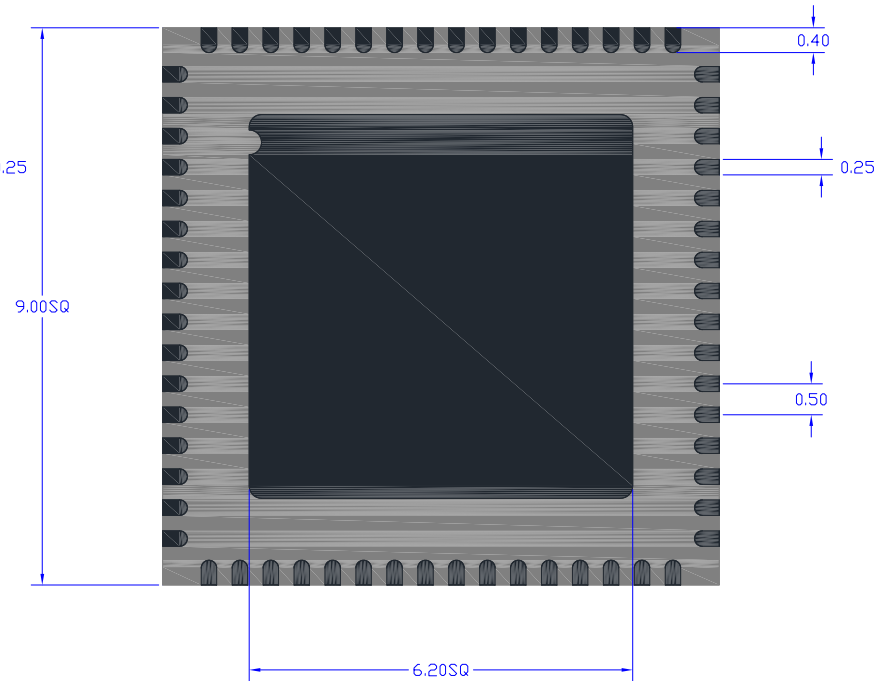


CP-64-12 - AEK

# 64LFCSP\_6.2EP - 9 x 9

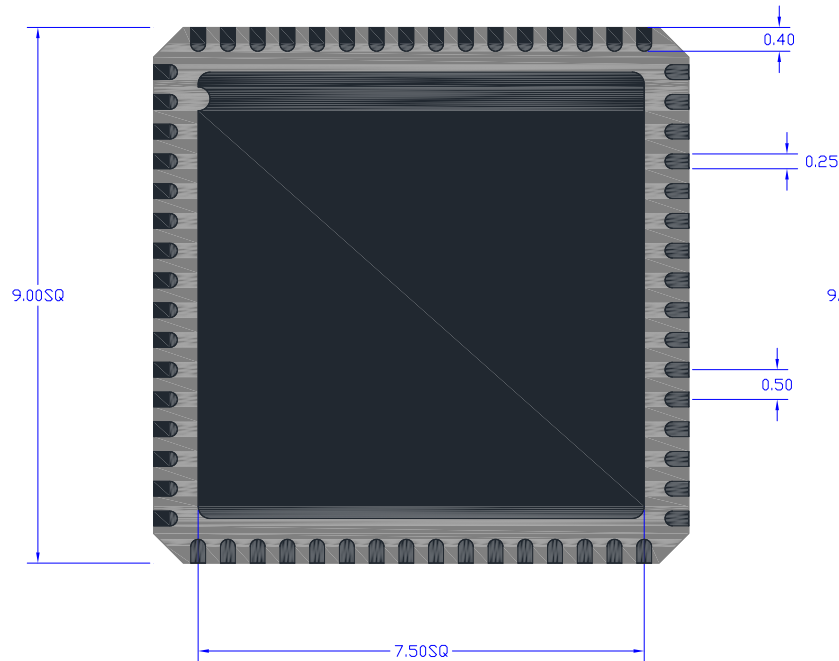


CP-64-4 - STA

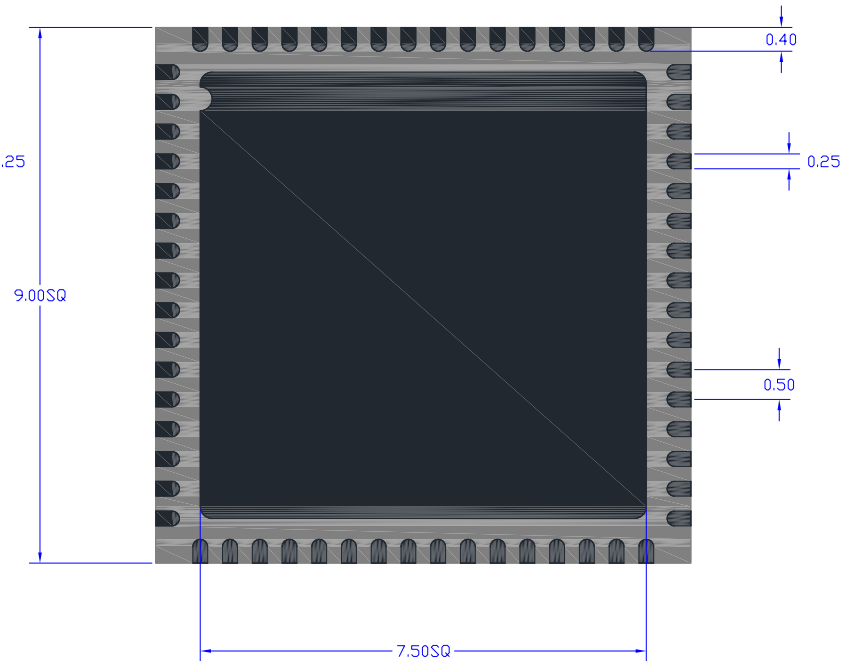


CP-64-17 - AEK

# 64LFCSP\_7.5EP - 9 x 9

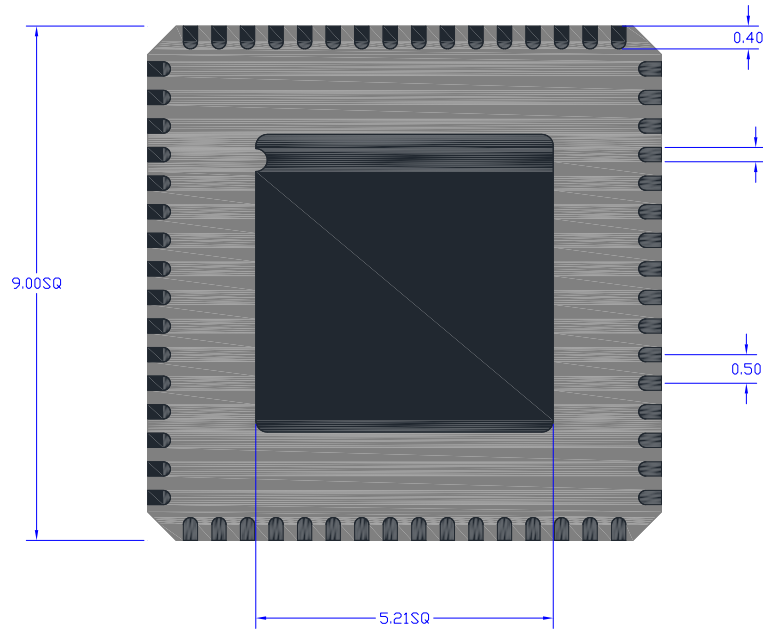


CP-64-6 - STA

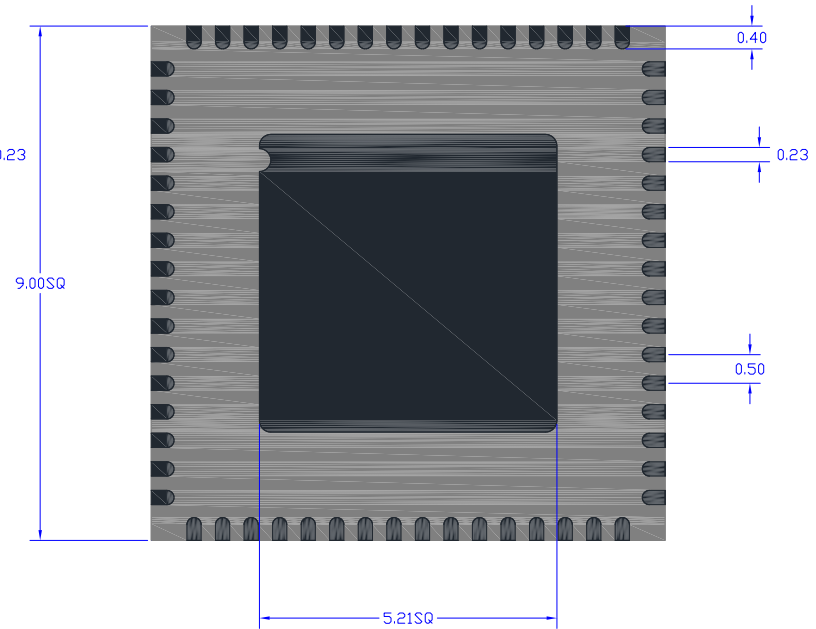


CP-64-10 - AEK

# 64LFCSP\_5.21EP - 9 x 9



CP-64-7 - STA



CP-64-22 - AEK

**Conversion of Select Sizes LFCSP Products from Punched to Sawn  
and Transfer of Assembly Site to ASE Korea**

**Qualification Plan Summary for  
Side-by-Side Die Sawn LFCSP at ASE Korea**

TEST	SPECIFICATION	SAMPLE SIZE	EXPECTED COMPLETION DATE
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3 x 45	Nov 2020
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3 x 11	Nov 2020
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	3 x 45	Nov 2020
High Temperature Storage (HTS)	JEDEC <i>JESD22-A103</i>	1 x 45	Nov 2020
Unbiased Highly Accelerated Stress Test (UHAST)*	JEDEC <i>JESD22-A102</i>	3 x 45	Nov 2020

\* Preconditioned per JEDEC/IPC J-STD-020.

## Conversion of Select Sizes LFCSP Products from Punched to Sawn and Transfer of Assembly Site to ASE Korea

### Qualification Results Summary for LFCSP at ASE Korea

TEST	SPECIFICATION	SAMPLE SIZE	RESULT
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	9 x 77	PASS
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	9 x 11	PASS
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	9 x 77	PASS
High Temperature Storage (HTS)	JEDEC <i>JESD22-A103</i>	3 x 77	PASS
Unbiased Highly Accelerated Stress Test (UHAST)*	JEDEC <i>JESD22-A118</i>	9 x 77	PASS
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	9 x 77	PASS

\* Preconditioned per JEDEC/IPC J-STD-020.