

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.

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

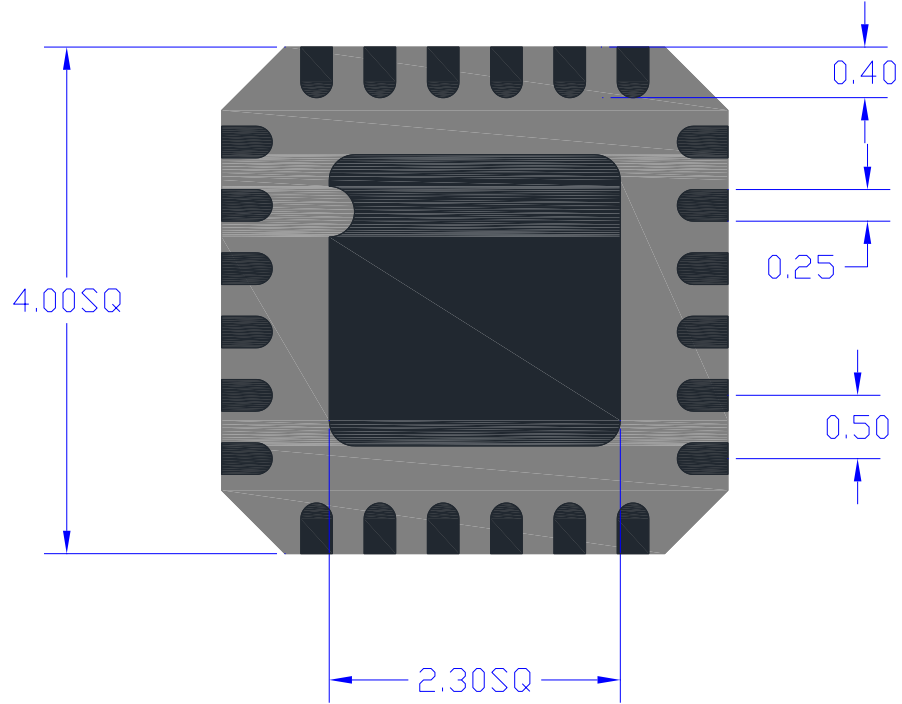
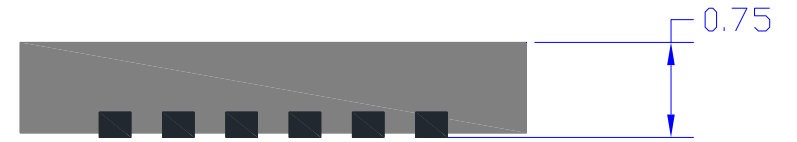
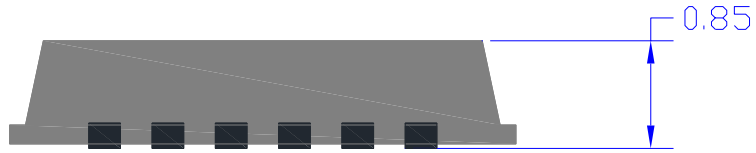
**Qualification Plan Summary for
Side-by-Side Die Sawn LFCSP at ASE Korea**

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

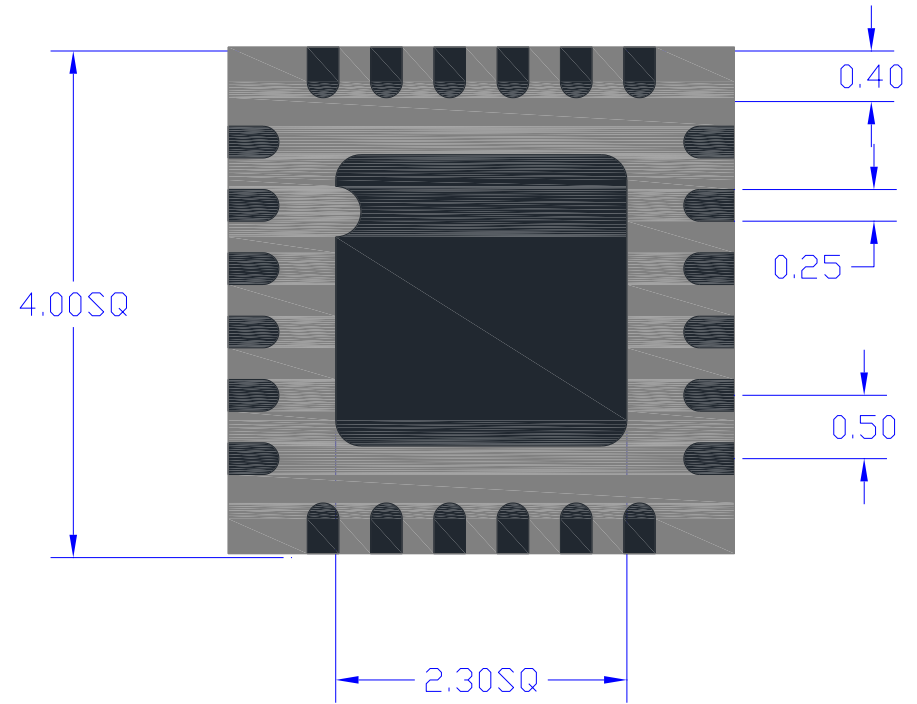
* Preconditioned per JEDEC/IPC J-STD-020.

FOOTPRINT COMPARISON DRAWING

24LFCSP_2.3EP - 4 x 4

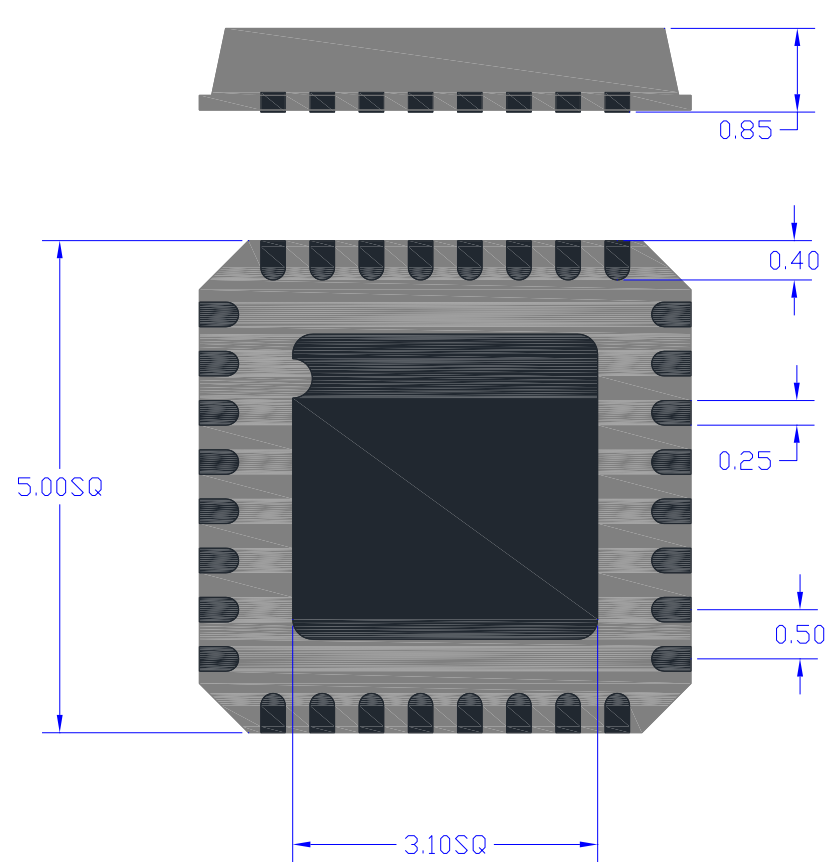


CP-24-2 - STA

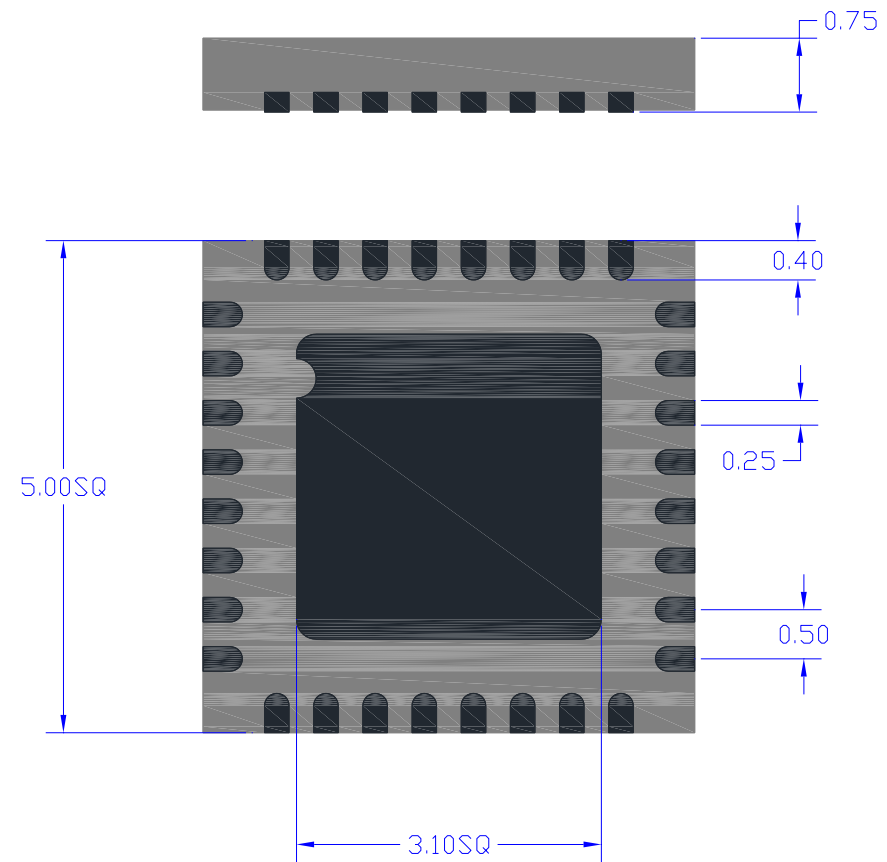


CP-24-14 - AEK

32LFCSP_3.1EP - 5 x 5

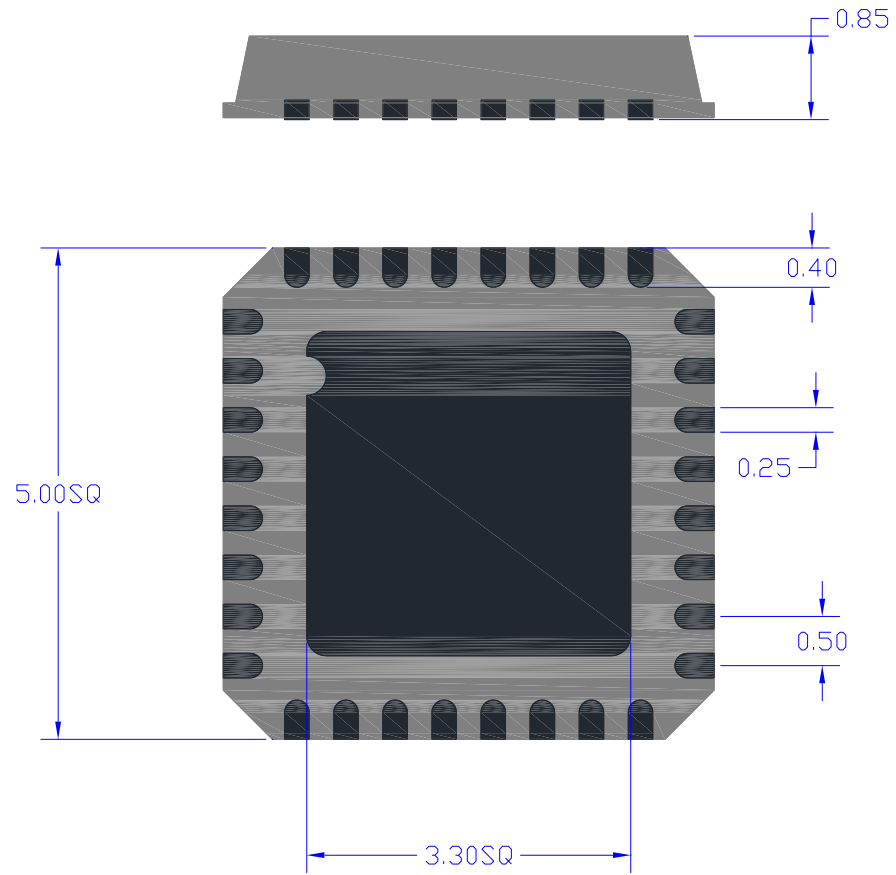


CP-32-2 - STA

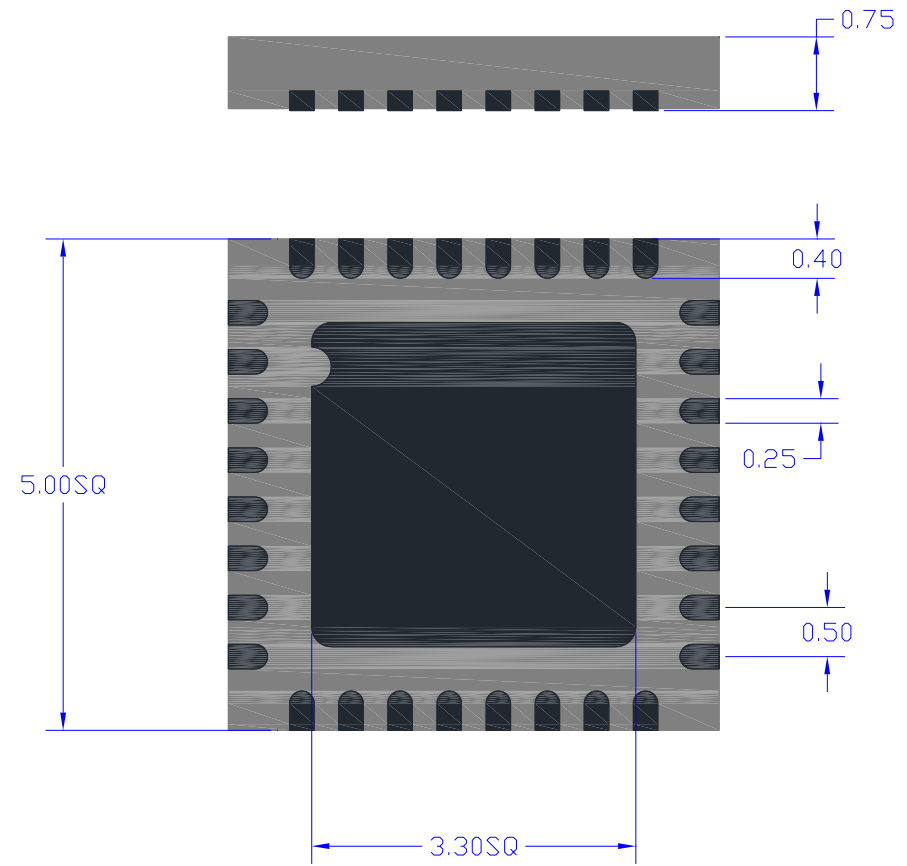


CP-32-7 - AEK

32LFCSP_3.3EP – 5 x 5

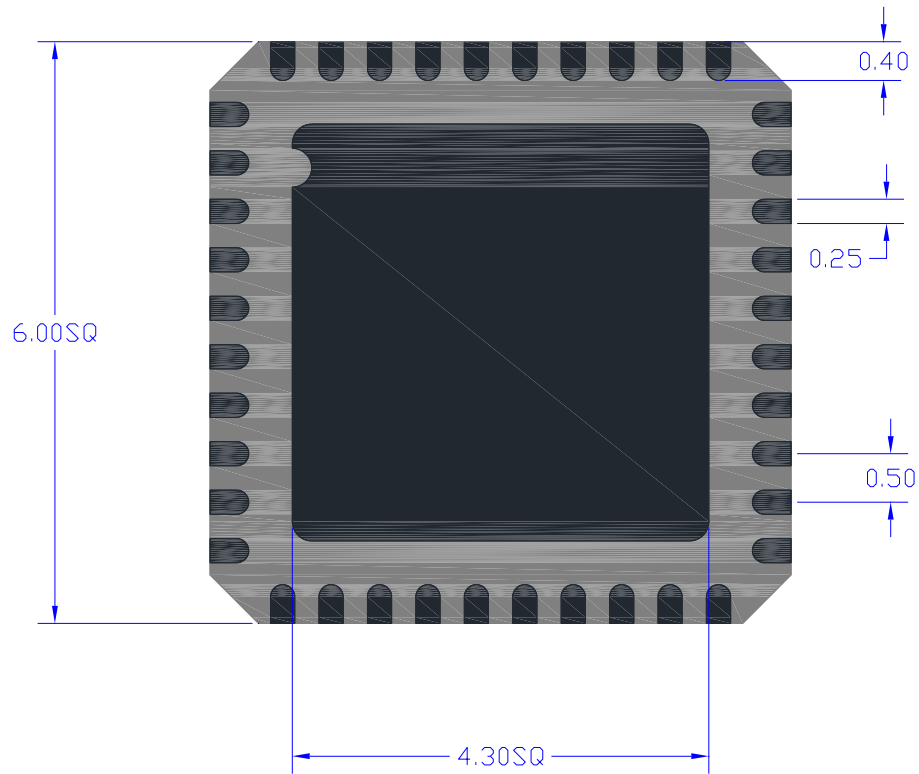
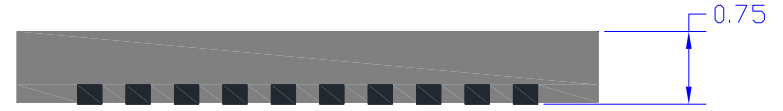
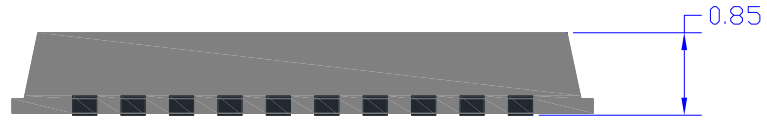


CP-32-3 - STA

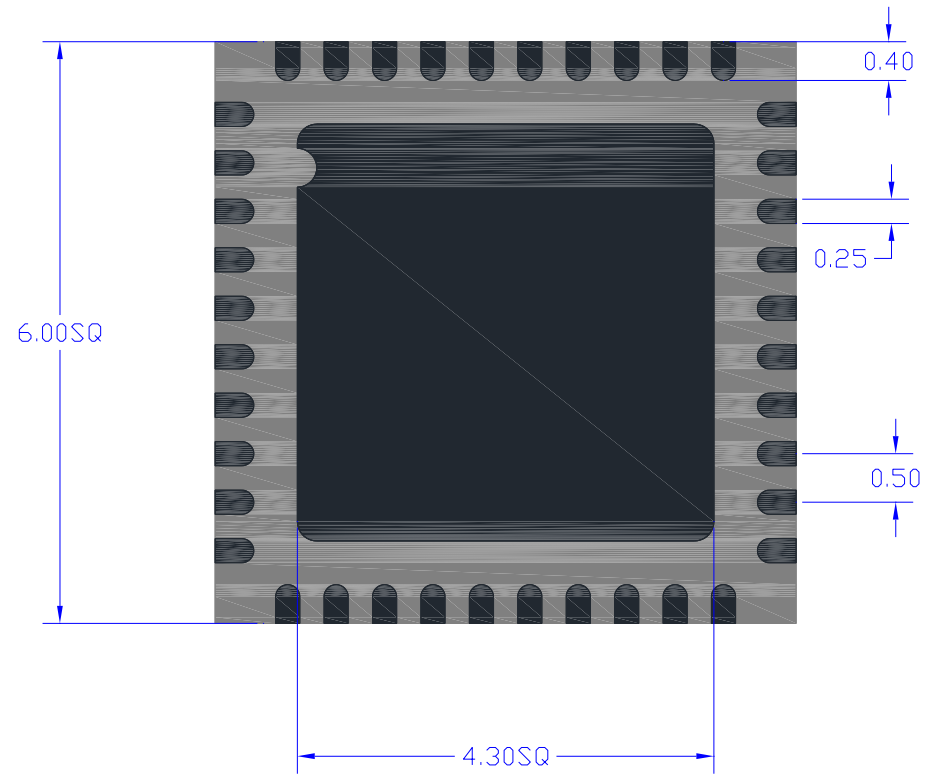


CP-32-13 - AEK

40LFCSP_4.3EP - 6 x 6

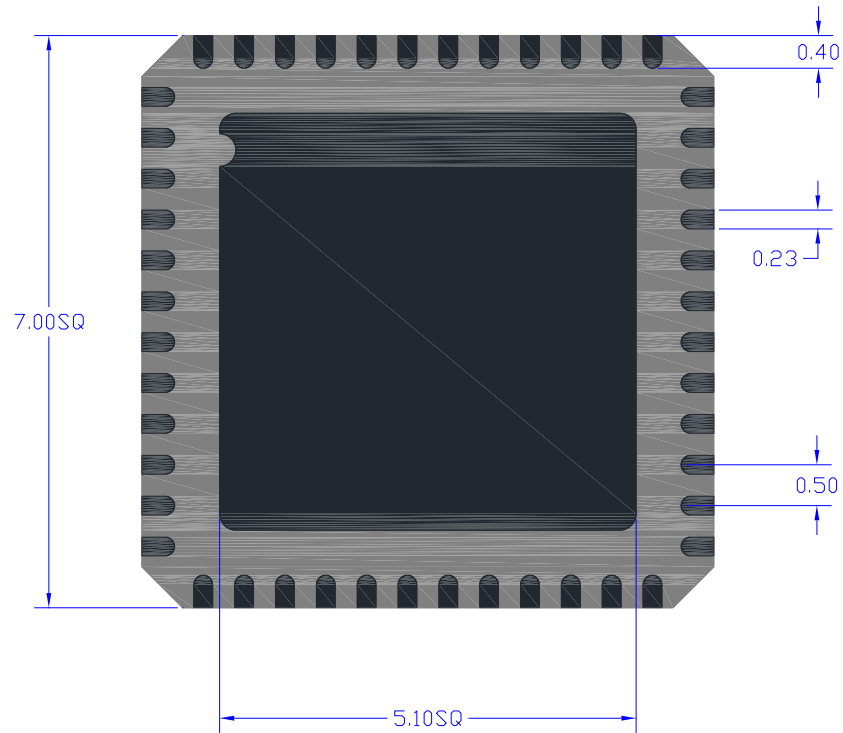
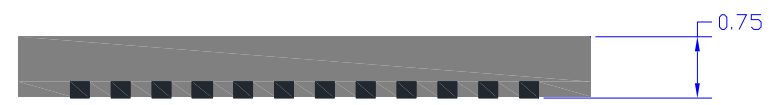
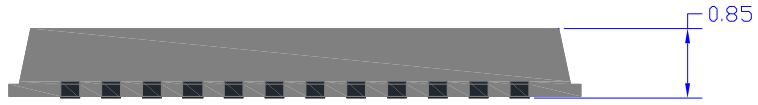


CP-40-4 - STA

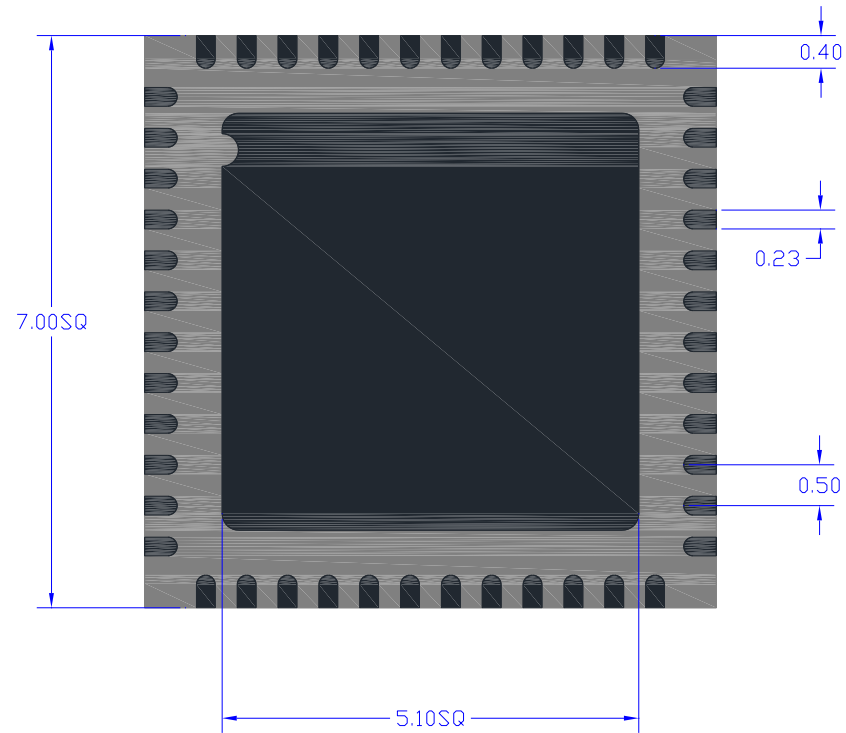


CP-40-10 - AEK

48LFCSP_5.1EP - 7 x 7

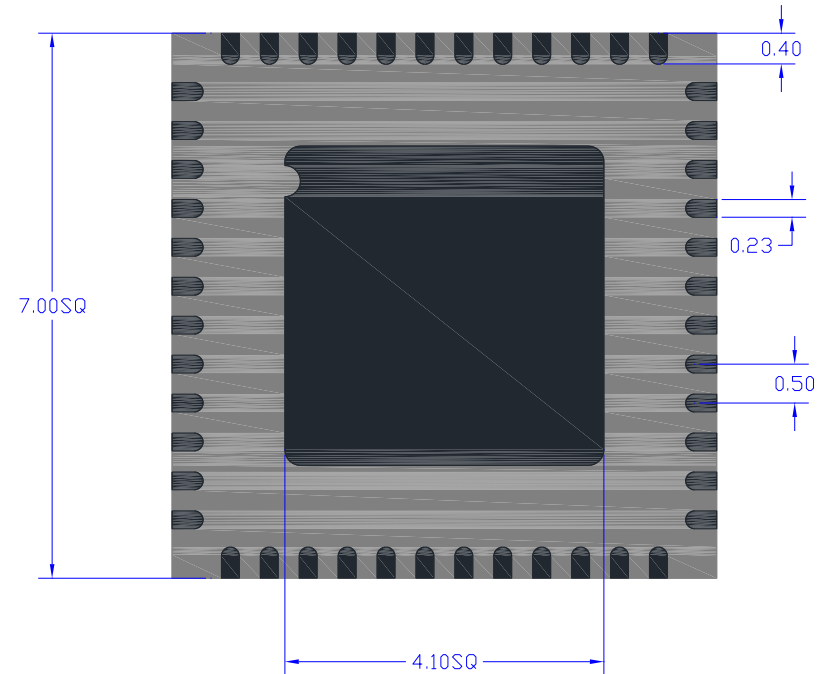
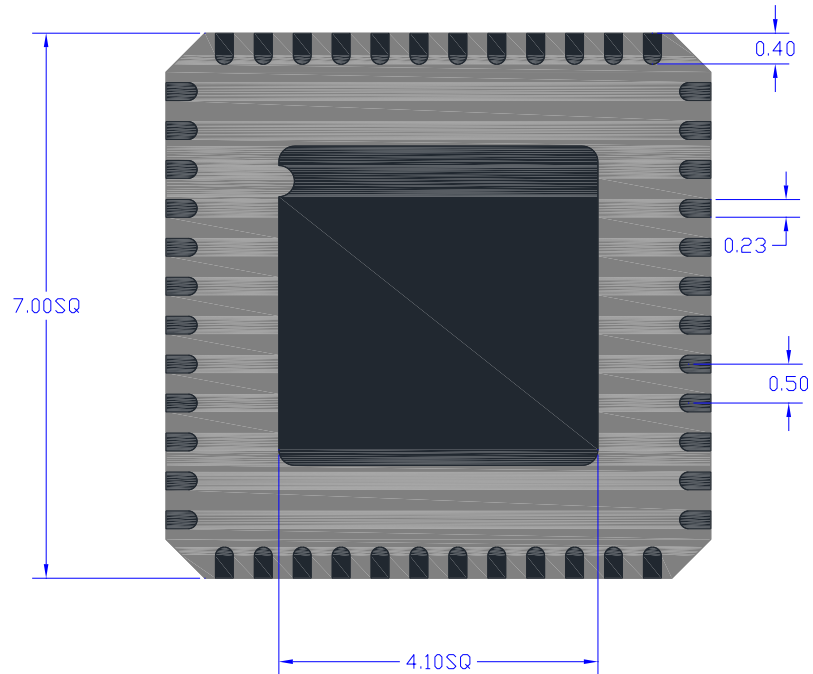
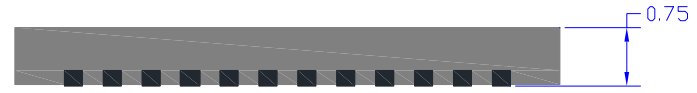


CP-48-1 - STA



CP-48-4 - AEK

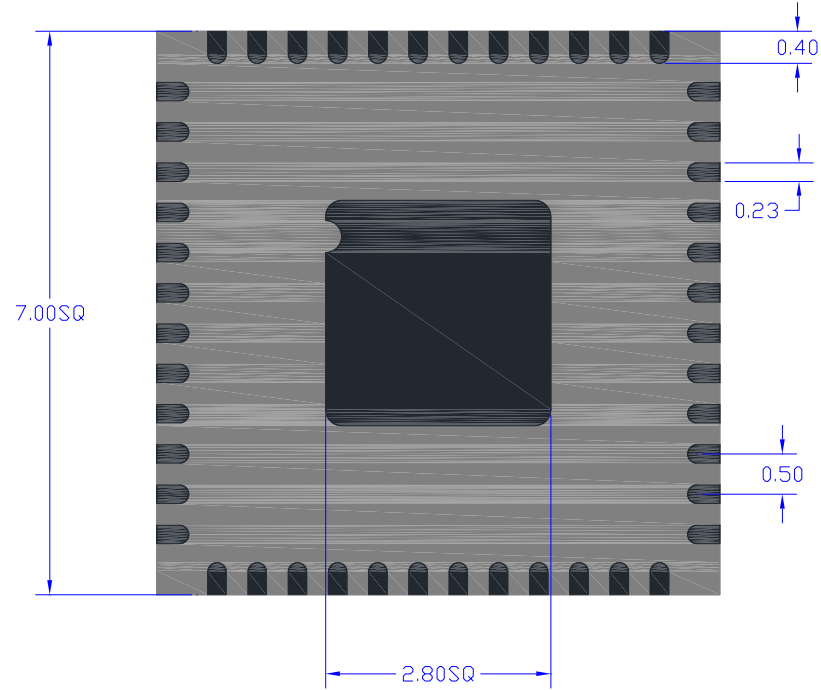
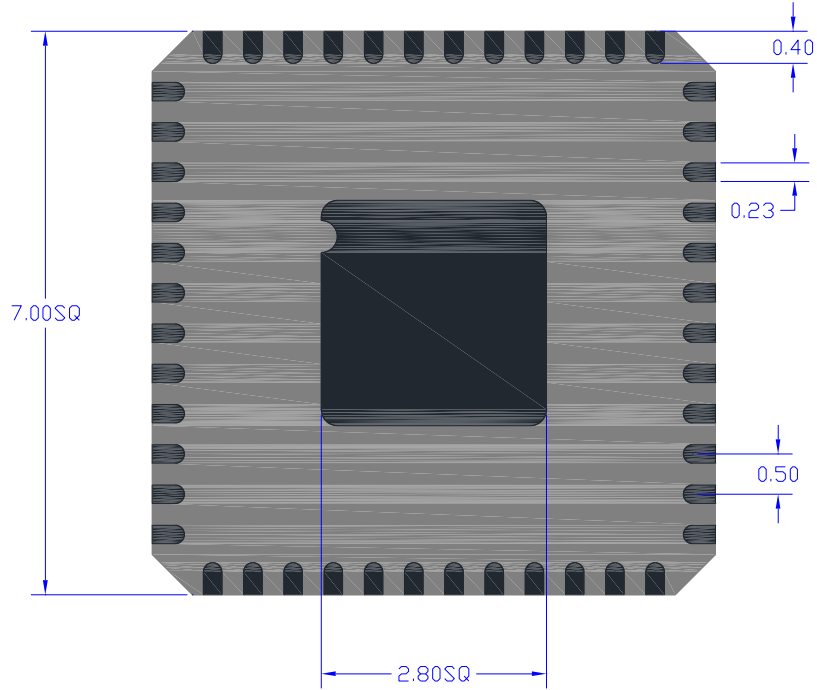
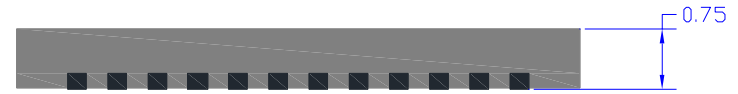
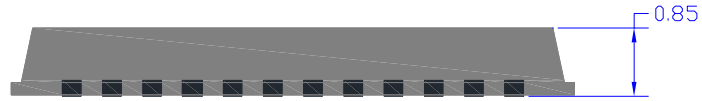
48LFCSP_4.1EP - 7 x 7



CP-48-3 - STA

CP-48-5 - AEK

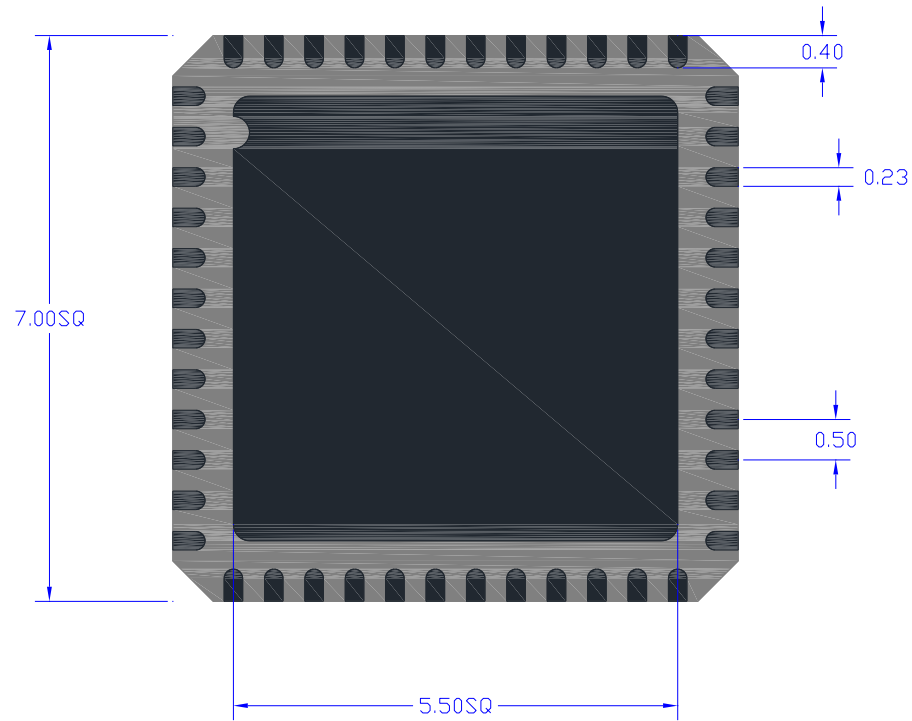
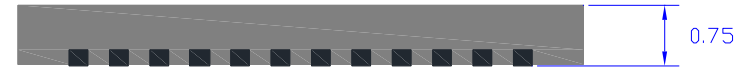
48LFCSP_2.8EP - 7 x 7



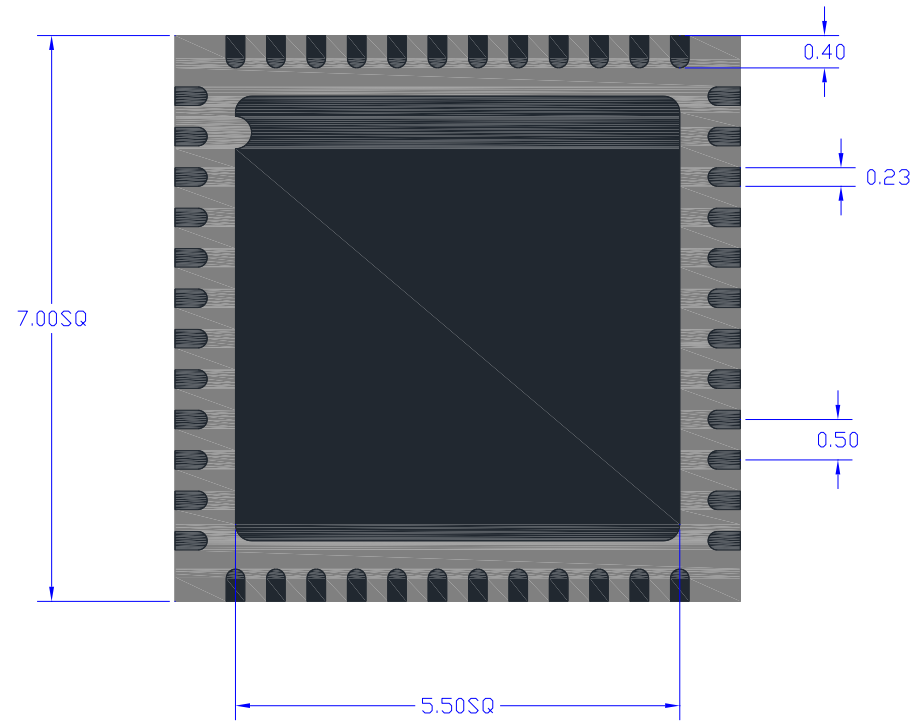
CP-48-6 - STA

CP-48-21 - AEK

48LFCSP_5.5EP - 7 x 7

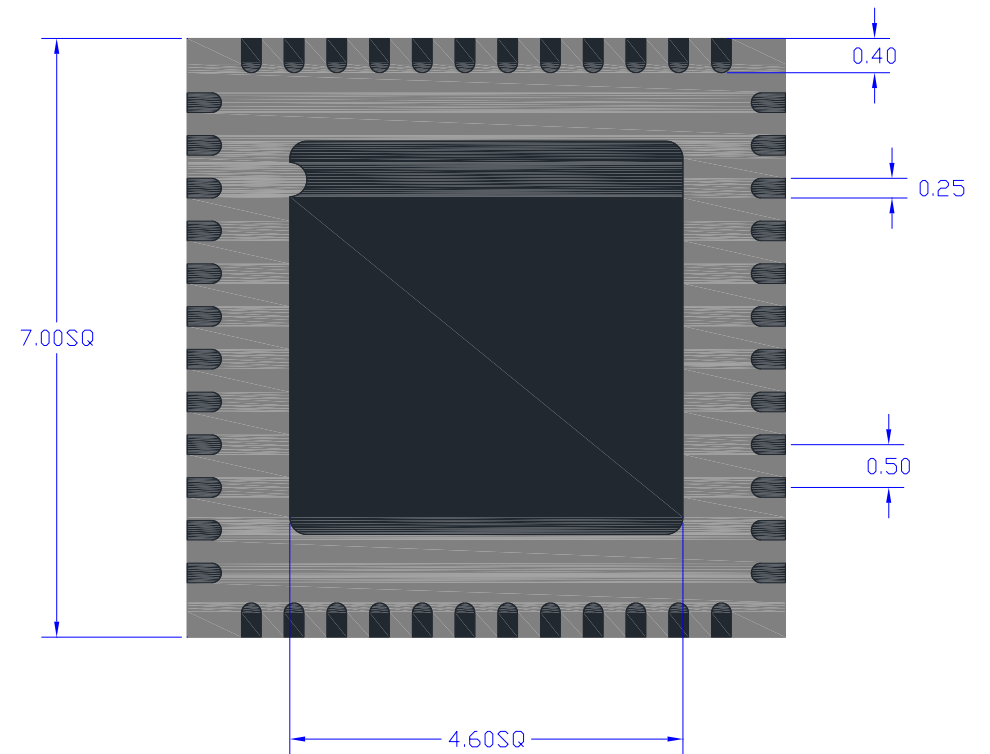
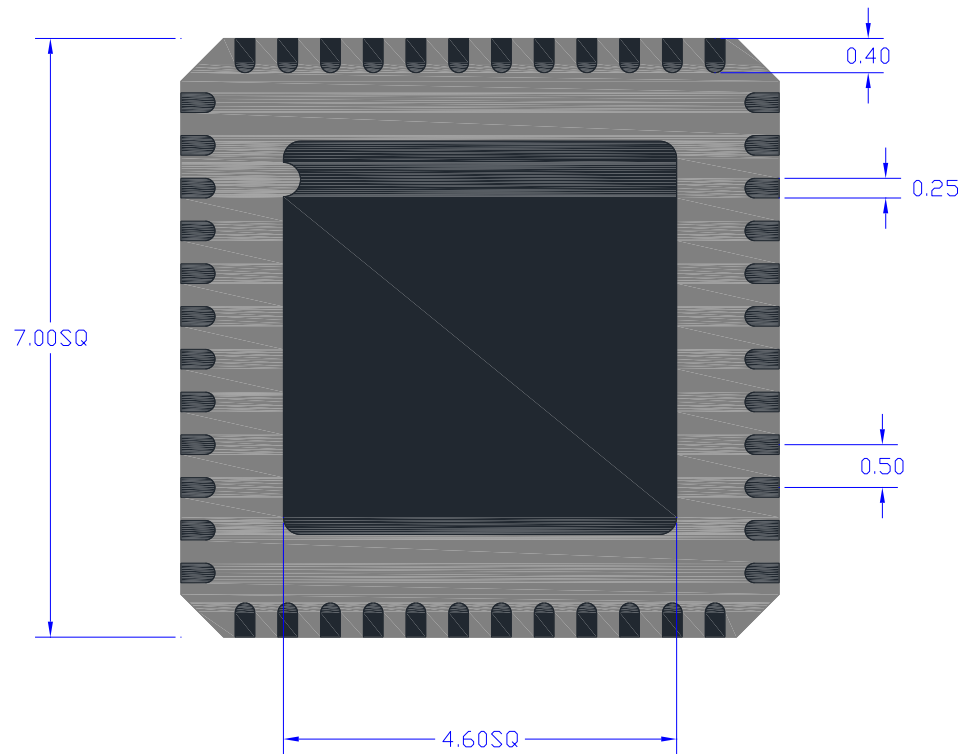


CP-48-8 - STA



CP-48-9 - AEK

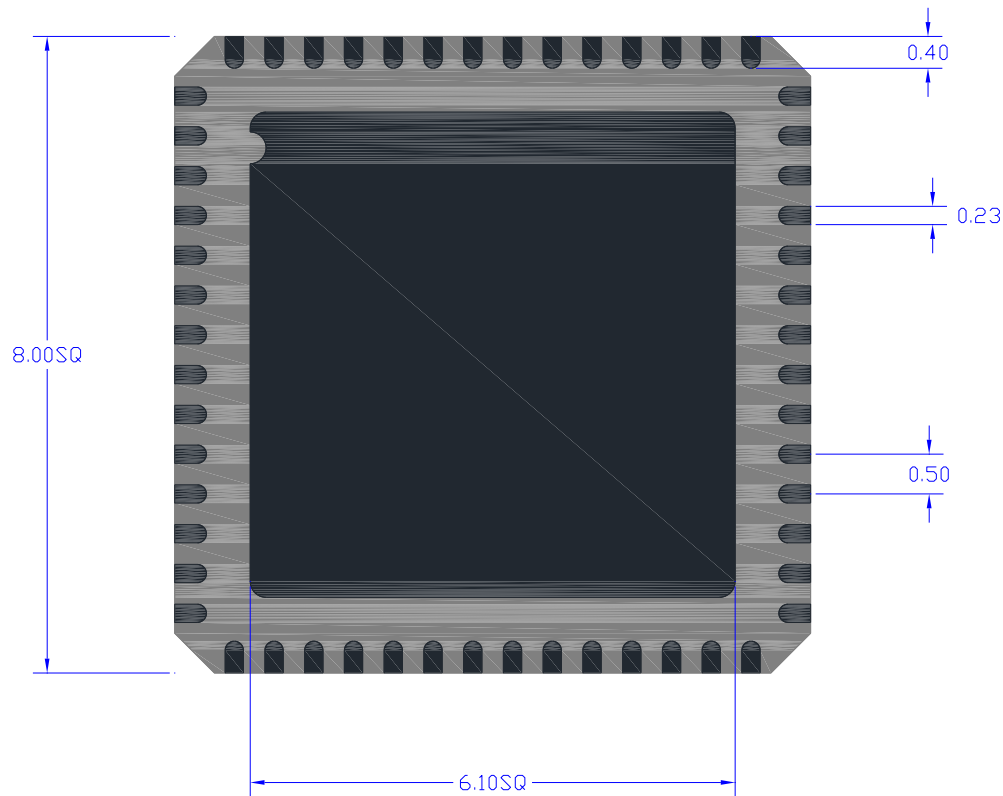
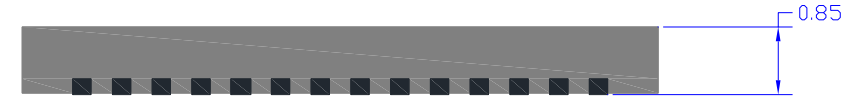
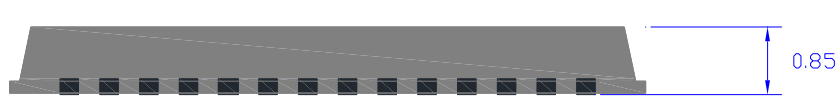
48LFCSP_4.6EP - 7 x 7



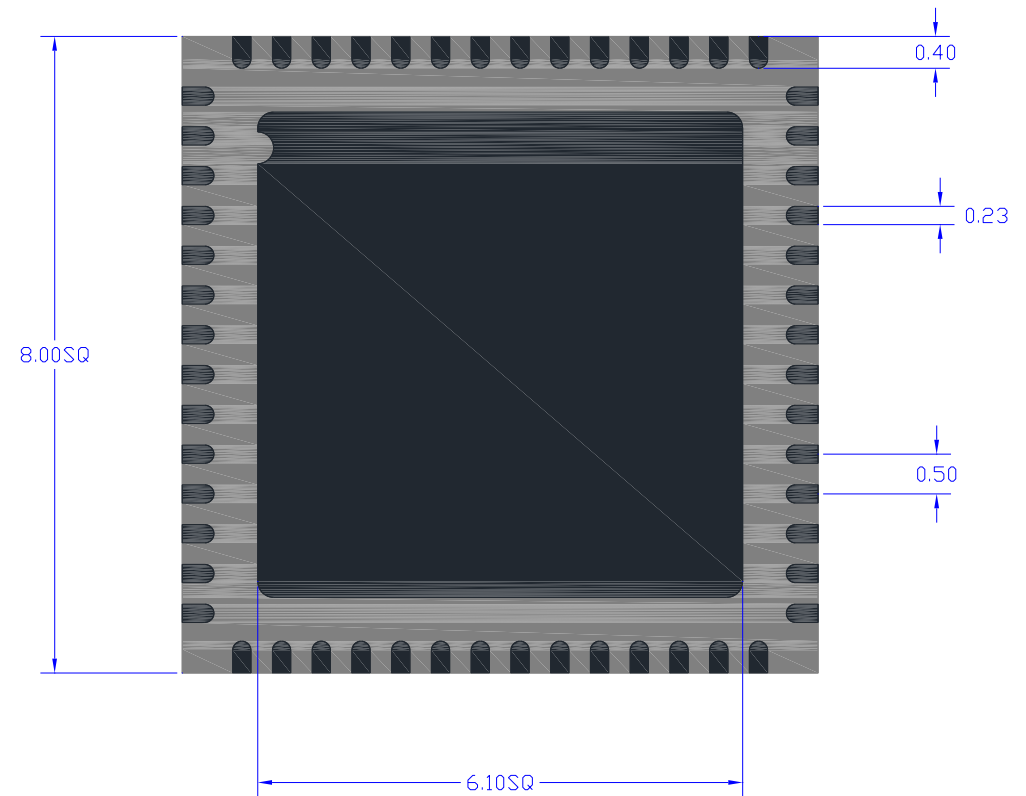
CP-48-12 - STA

CP-48-14 - AEK

56LFCSP_6.1EP – 8 x 8

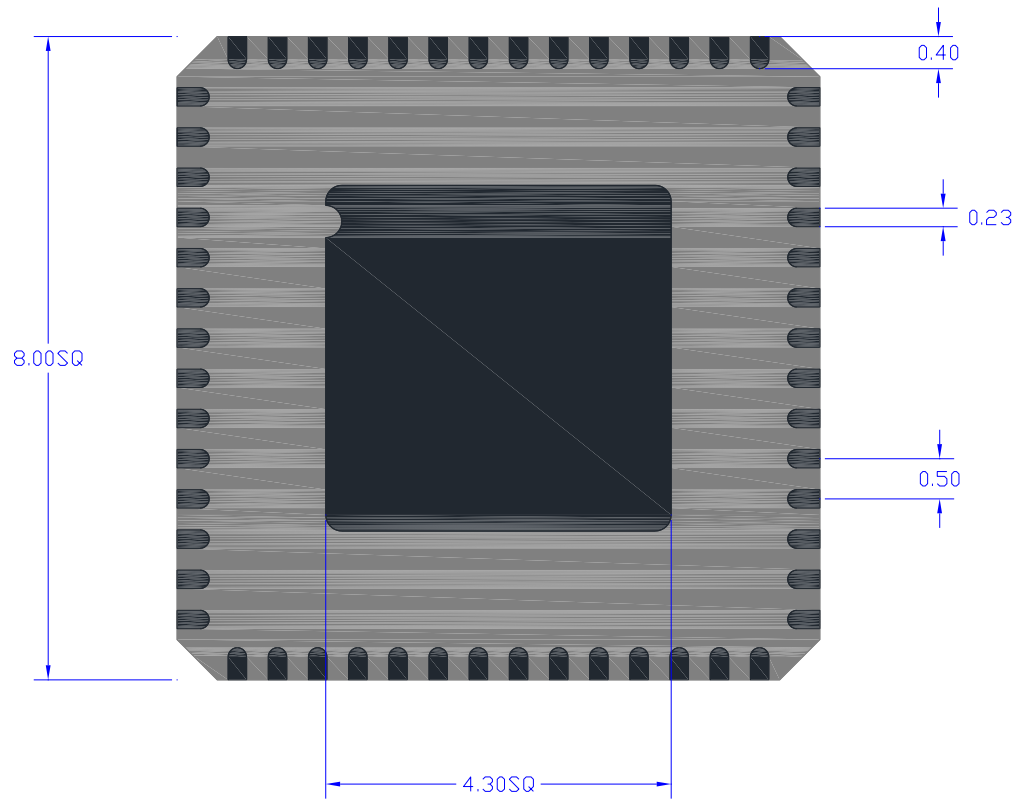


CP-56-1 - STA

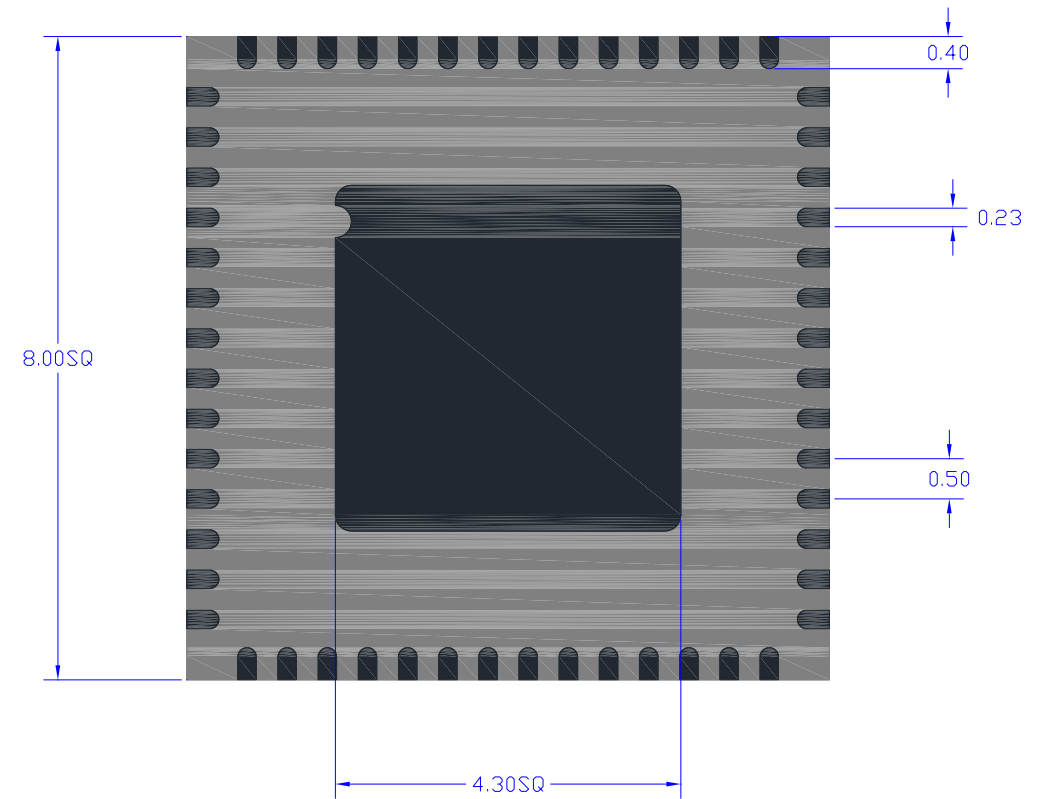


CP-56-22 - AEK

56LFCSP_4.3EP - 8 x 8

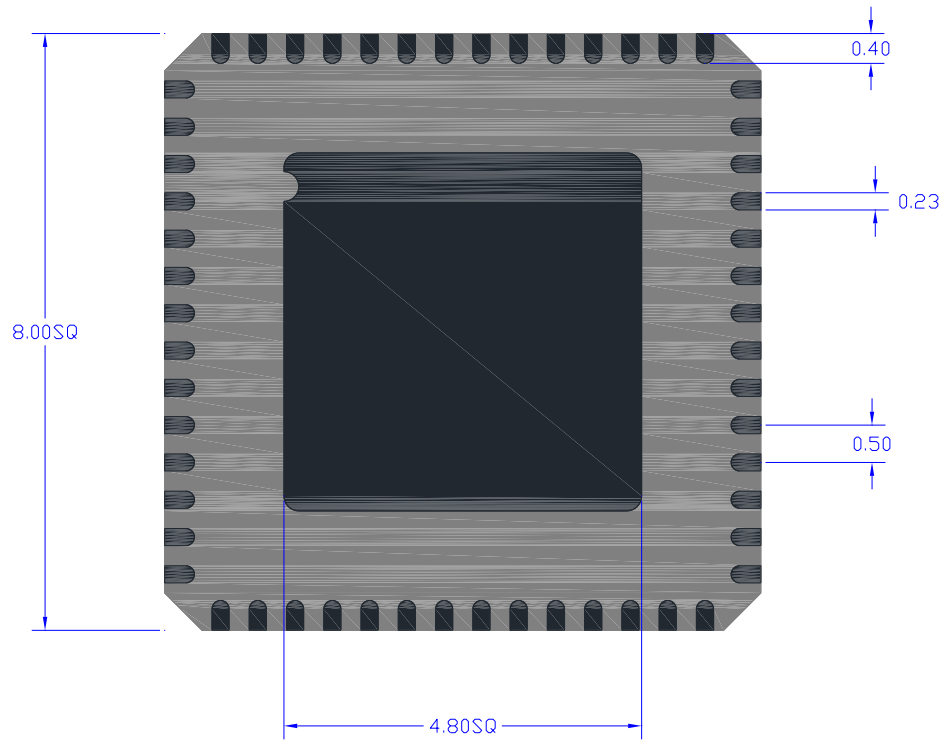


CP-56-2 - STA

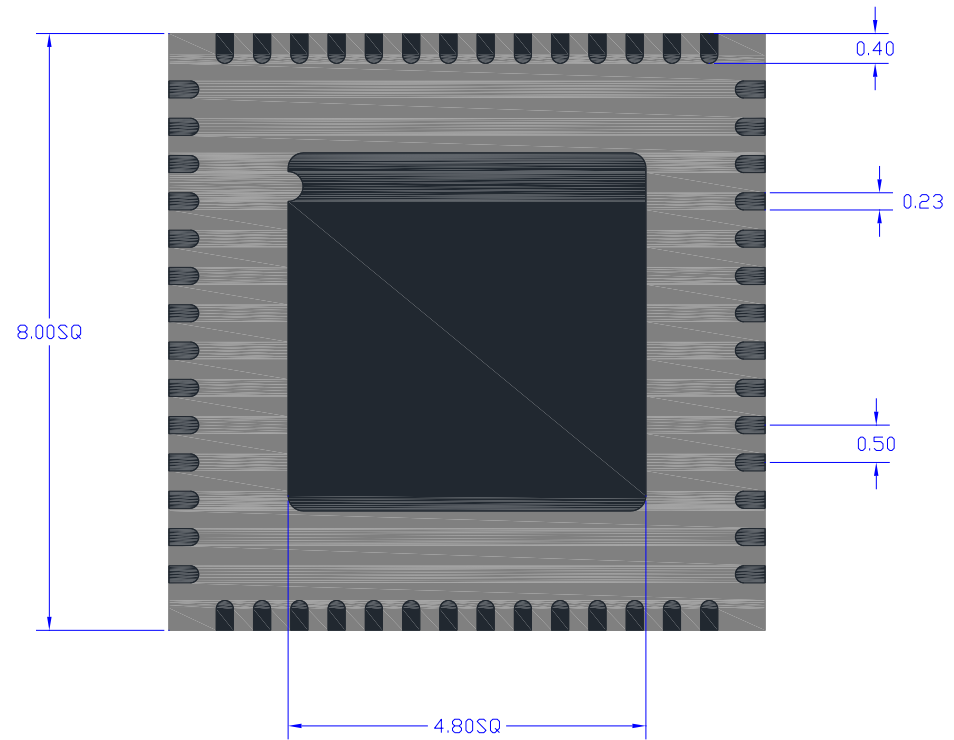


CP-56-17 - AEK

56LFCSP_4.8EP – 8 x 8

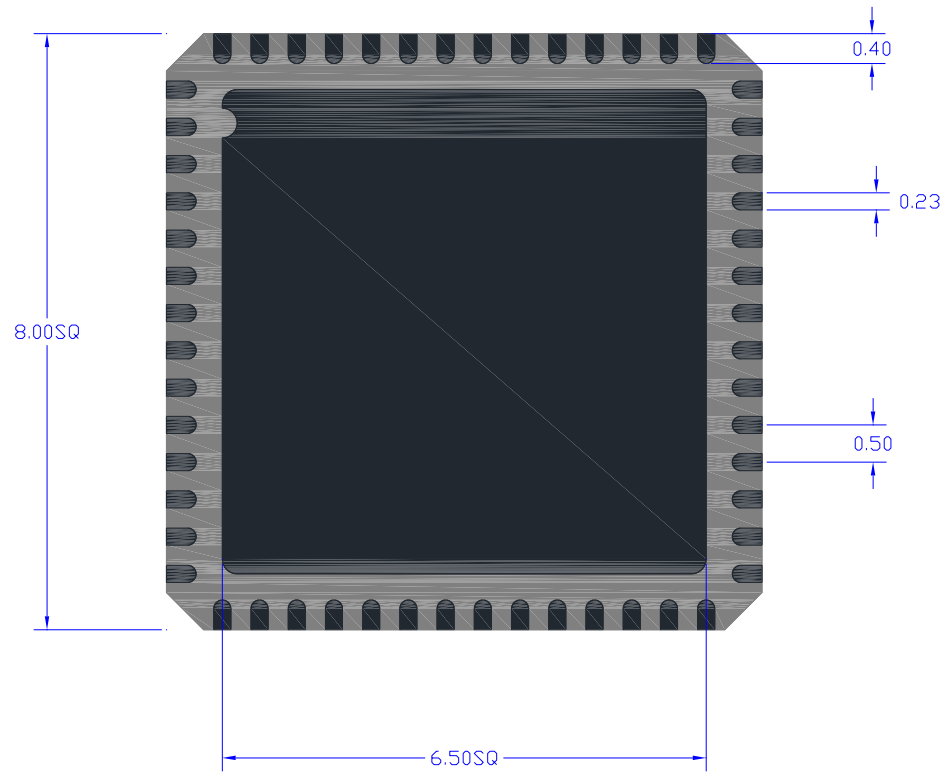


CP-56-3 - STA

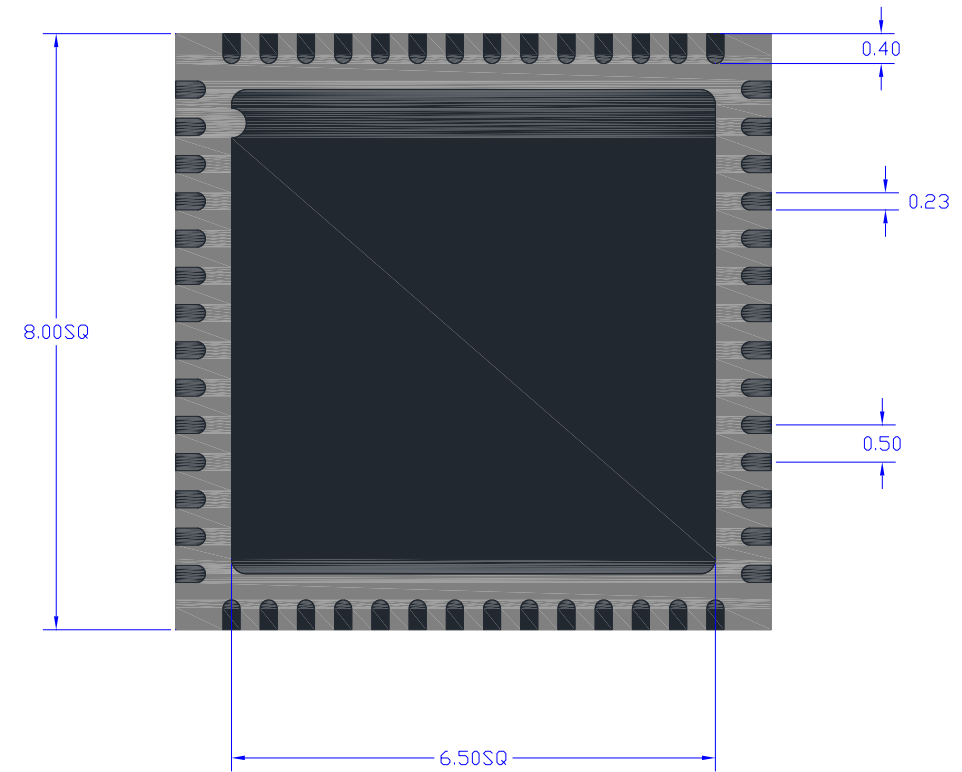


CP-56-18 - AEK

56LFCSP_6.5EP - 8 x 8

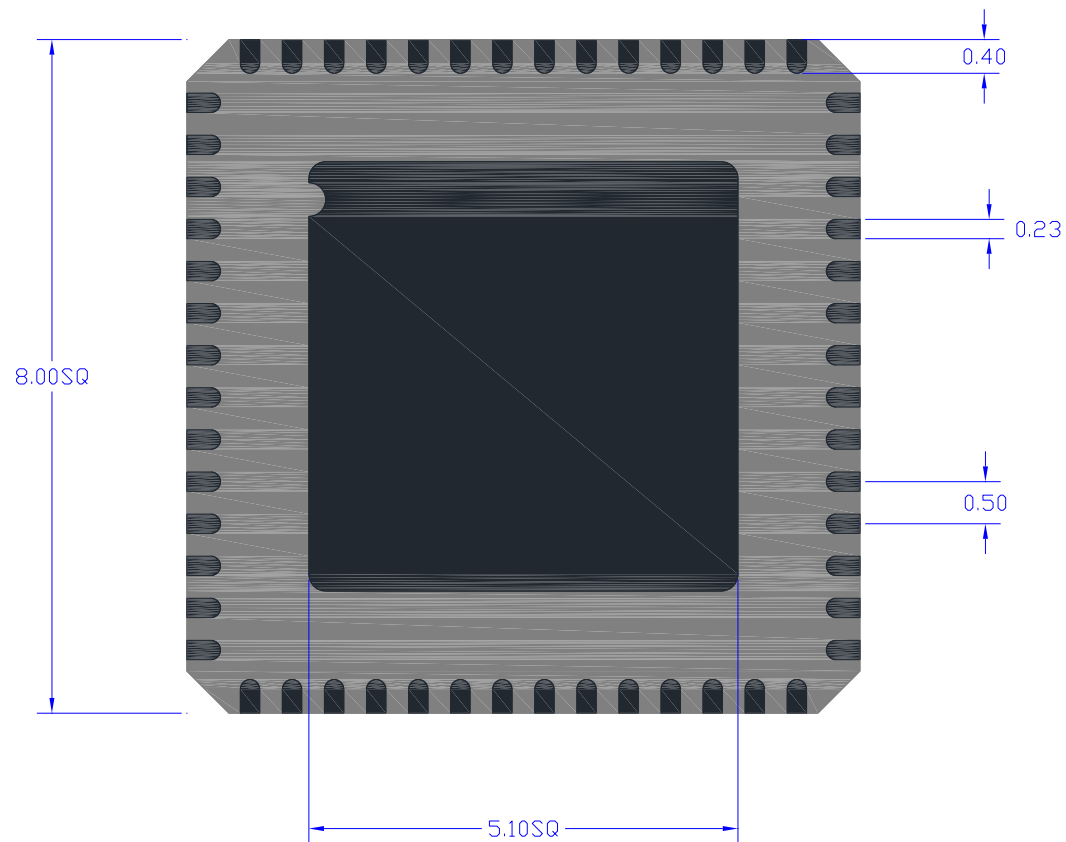
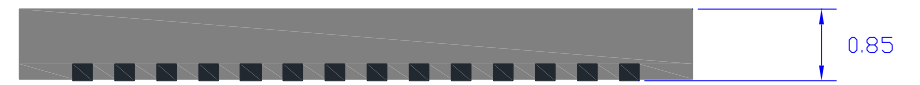


CP-56-4 - STA

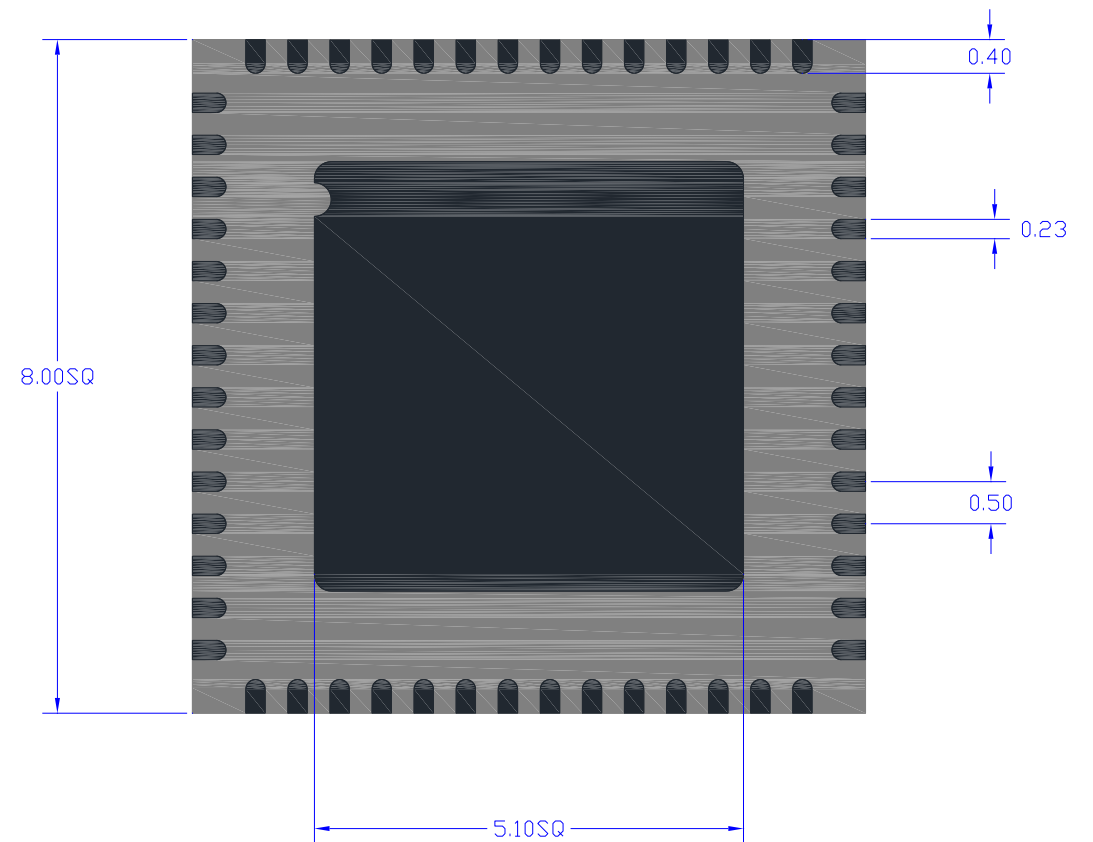


CP-56-19 - AEK

56LFCSP_5.1EP - 8 x 8

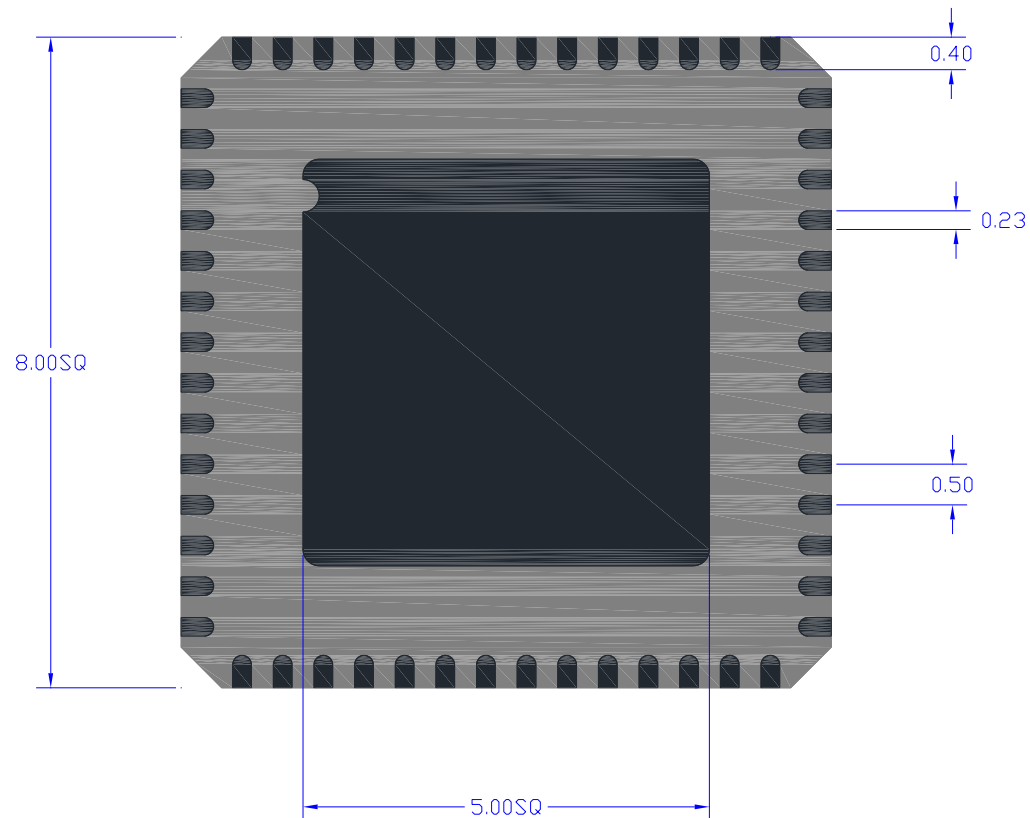


CP-56-5 - STA

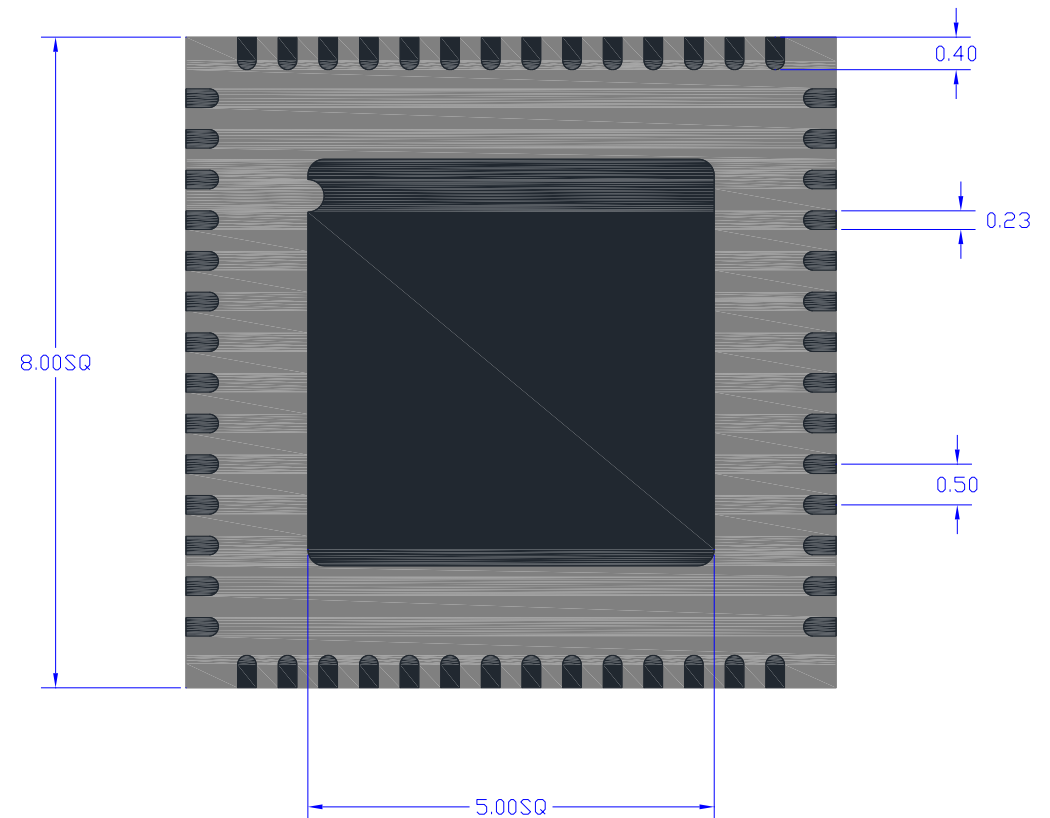


CP-56-20 - AEK

56LFCSP_5.0EP – 8 x 8

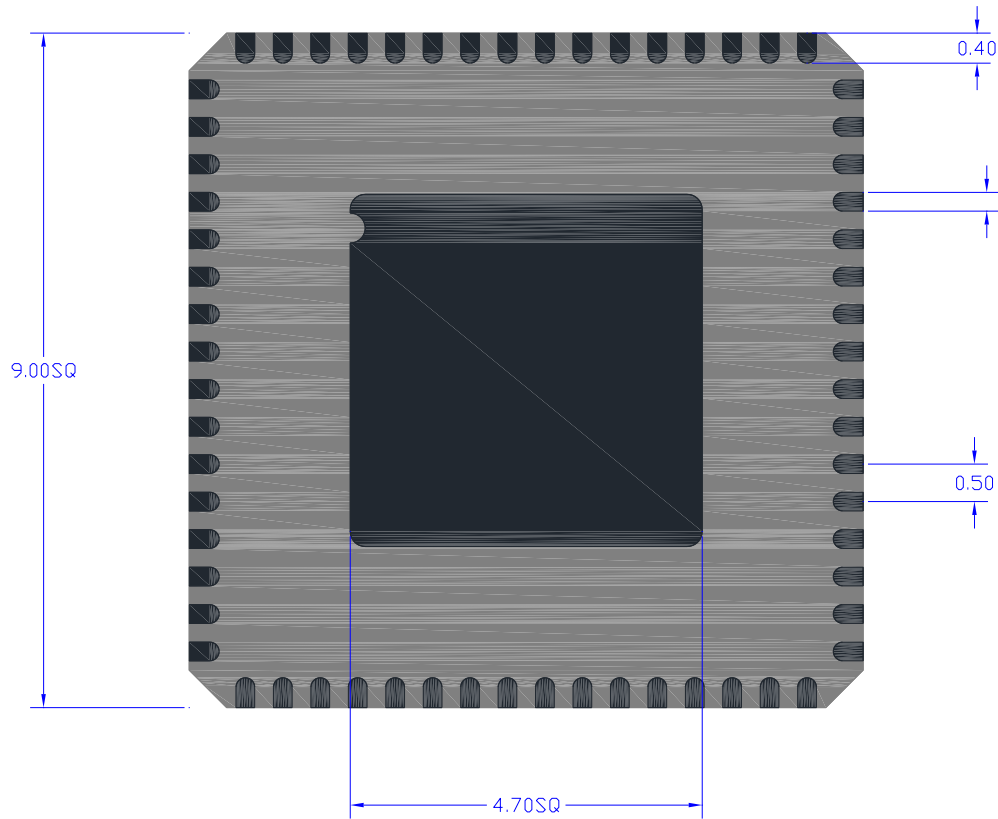


CP-56-5 - STA

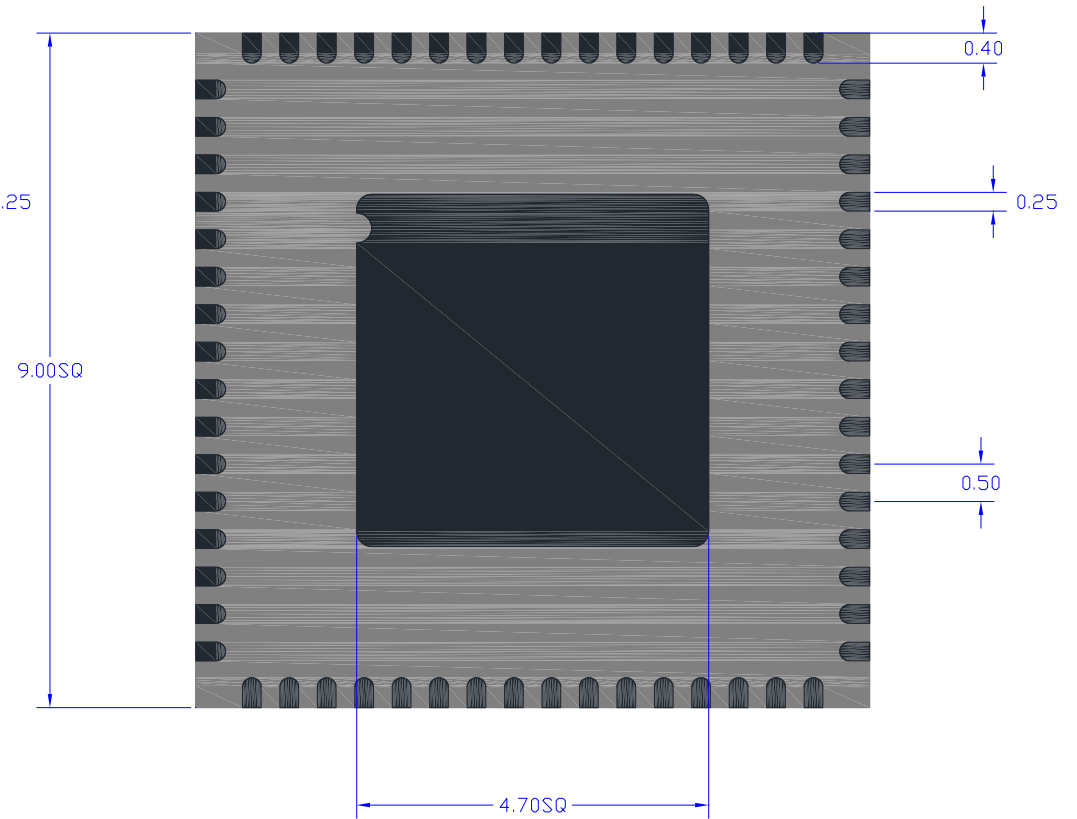


CP-56-21 - AEK

64LFCSP_4.7EP - 9 x 9

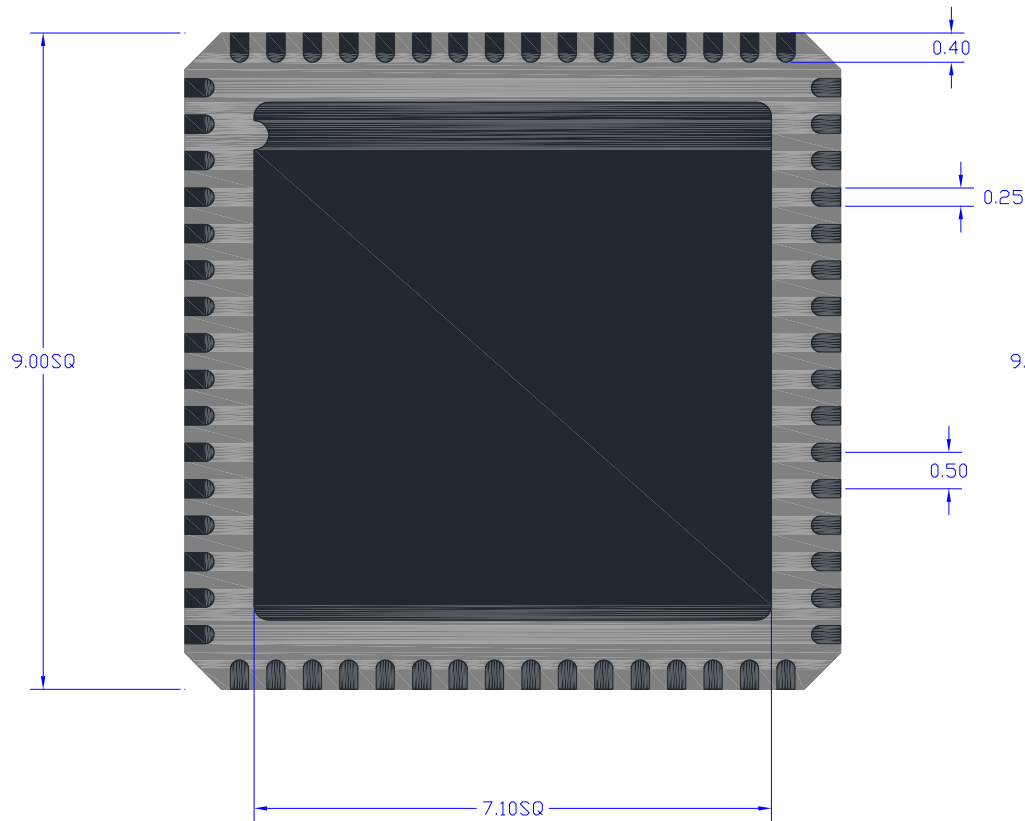


CP-64-1 - STA

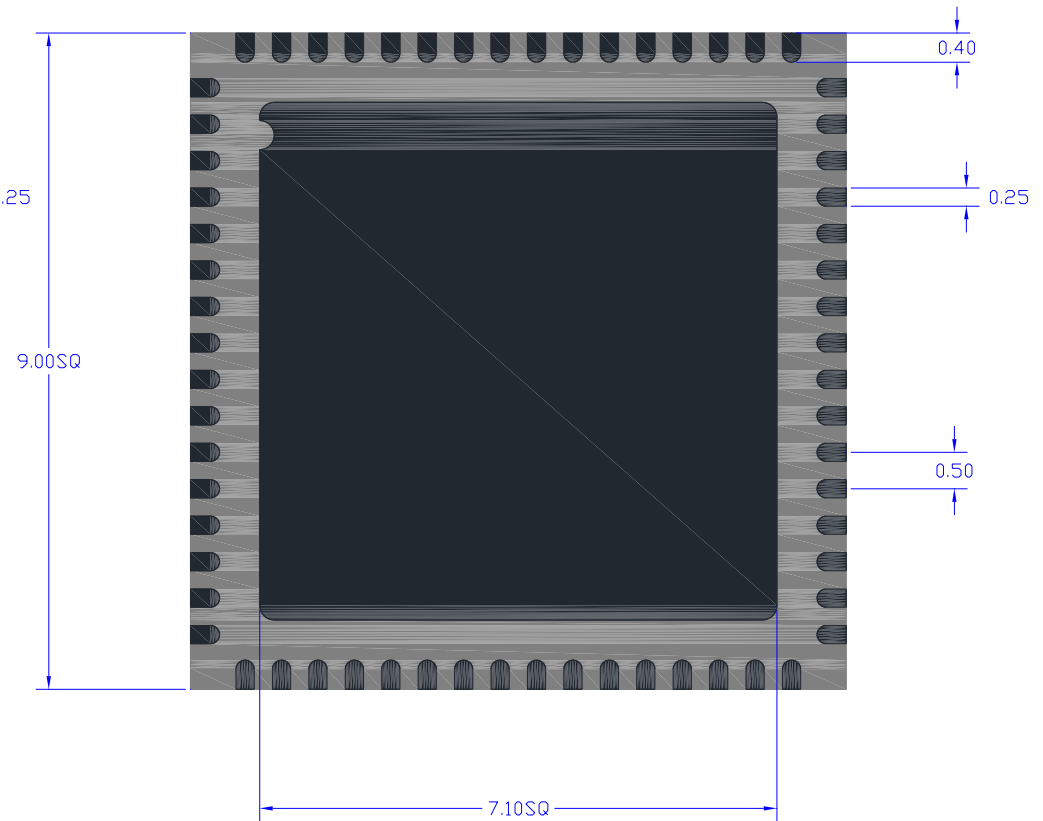


CP-64-21 - AEK

64LFCSP_7.1EP – 9 x 9

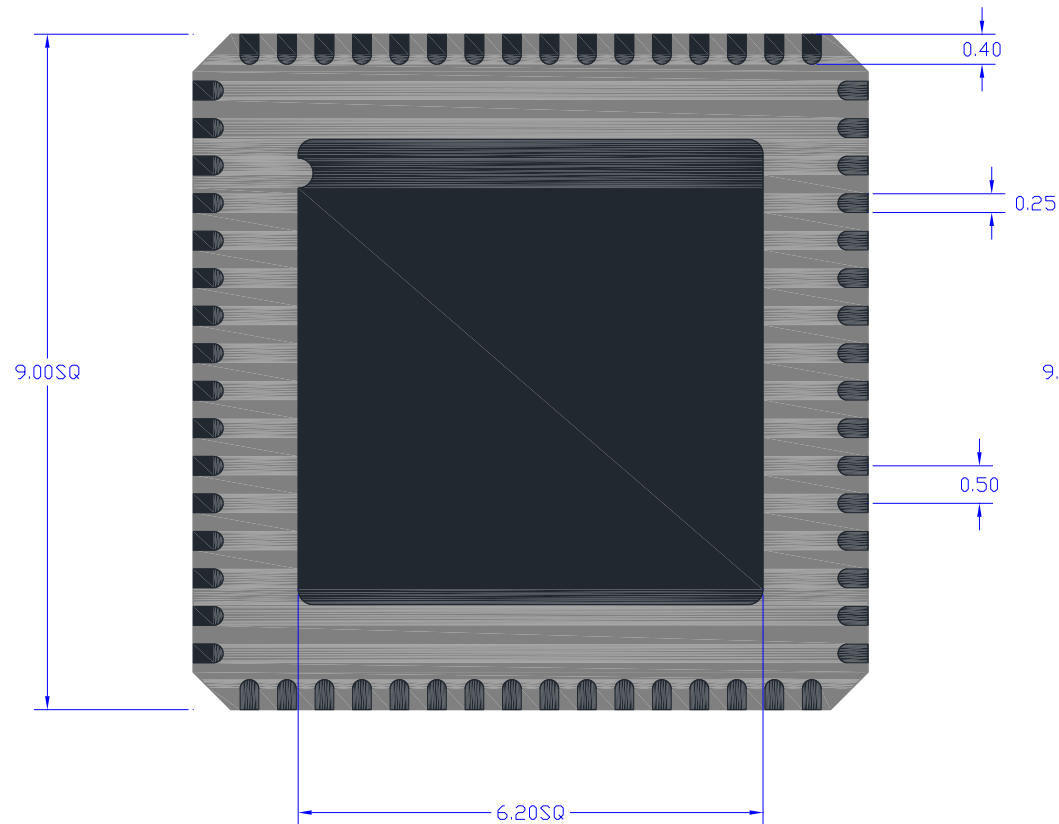


CP-64-3 - STA

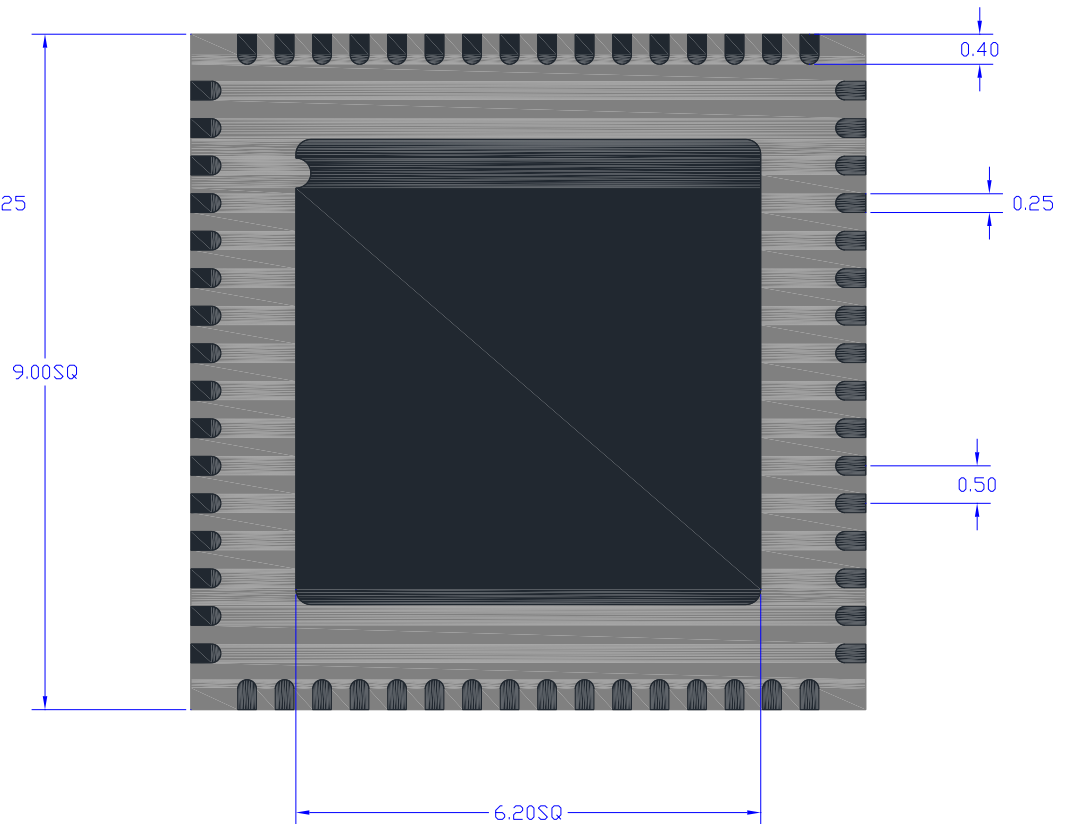


CP-64-12 - AEK

64LFCSP_6.2EP – 9 x 9

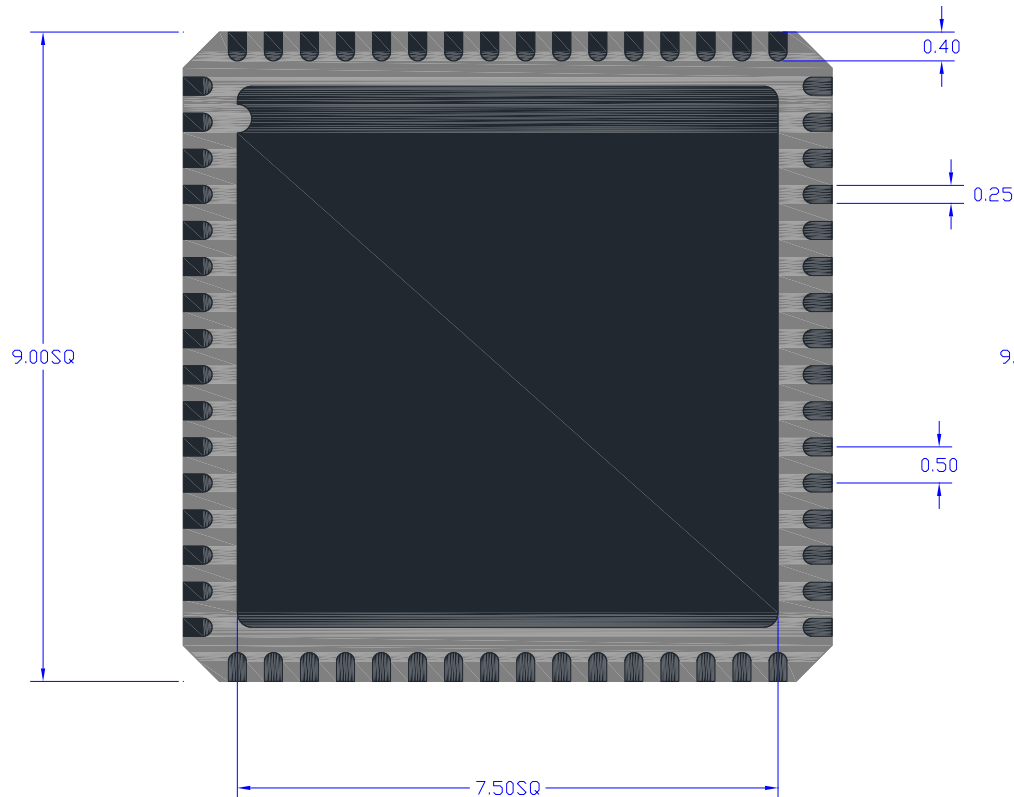


CP-64-4 - STA

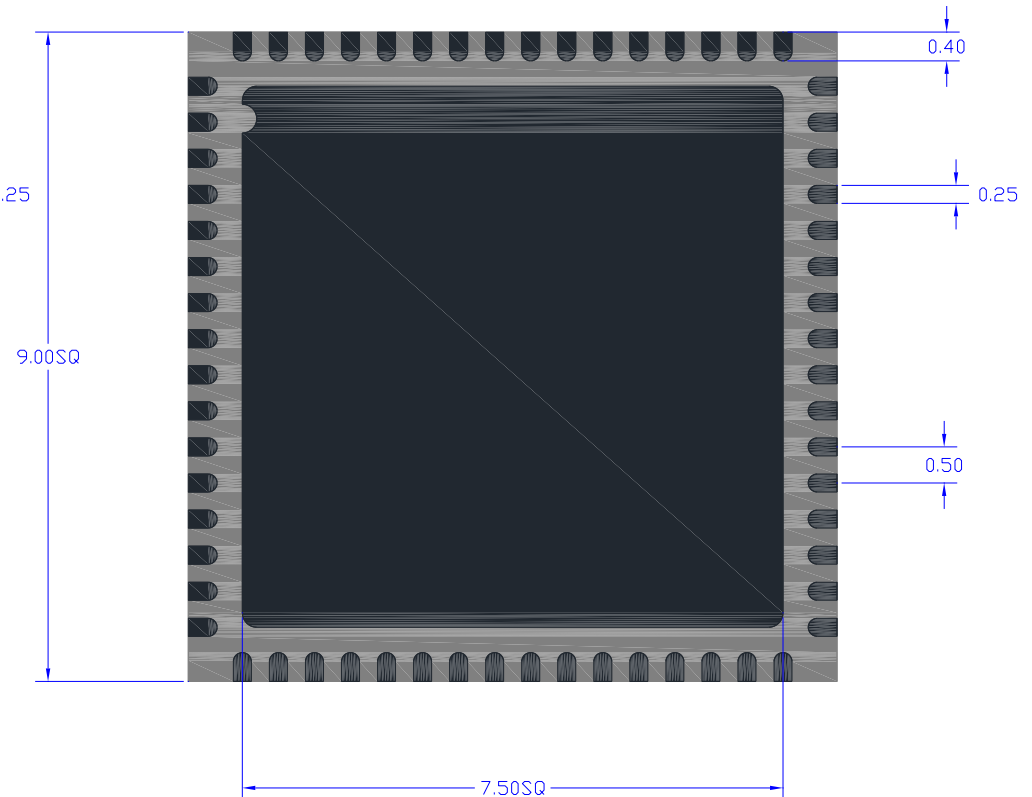


CP-64-17 - AEK

64LFCSP_7.5EP – 9 x 9

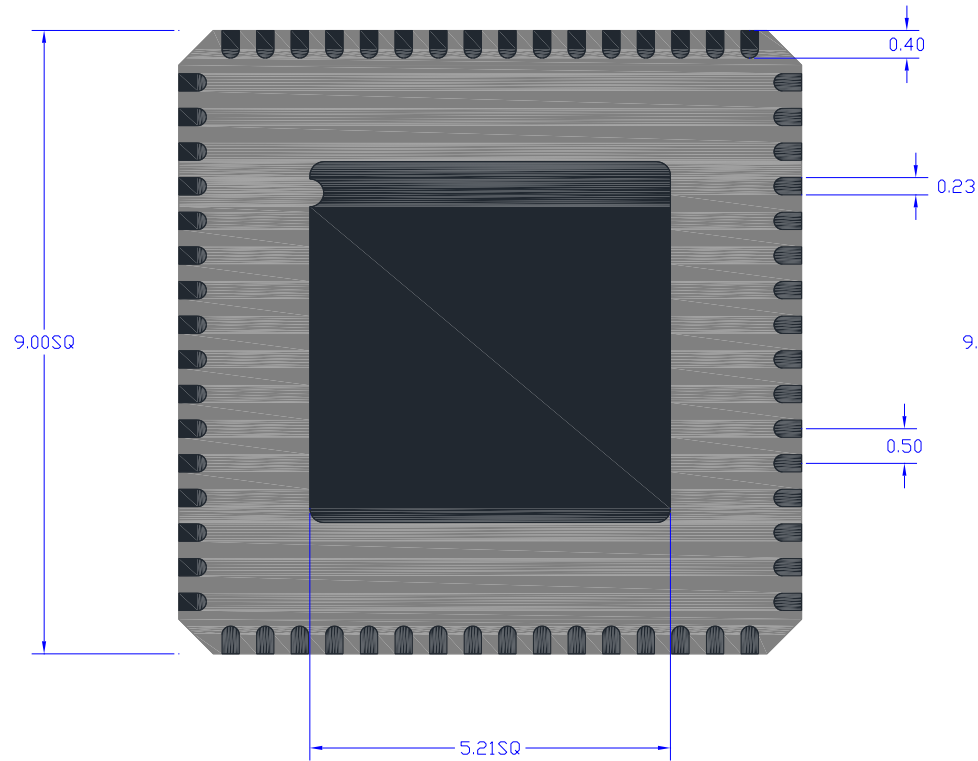


CP-64-6 - STA

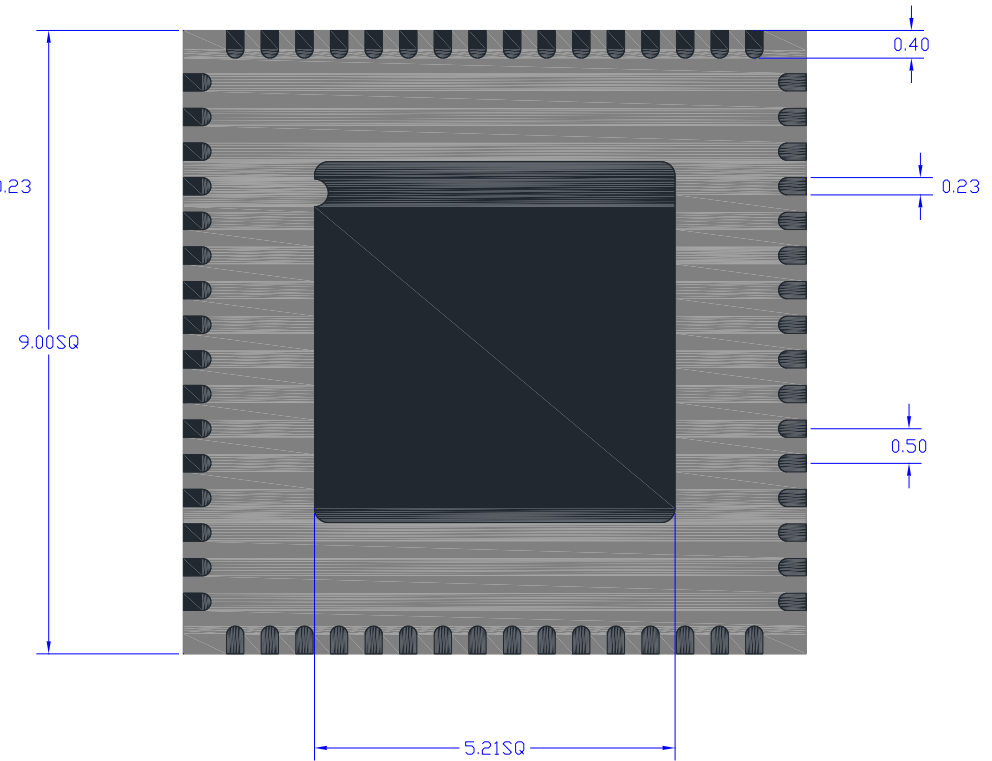


CP-64-10 - AEK

64LFCSP_5.21EP - 9 x 9



CP-64-7 - STA



CP-64-22 - AEK

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