

PCB Manufacturing Notes

General Info

Board dimensions – 40mm x 70mm
Number of layers – 2
Smallest hole – 0.3mm
Number of holes – Approx 120
Minimum Track & Gap – 0.15mm
RoHS/Lead Free – Yes
Material – FR4 or equivalent

Stackup

Stackup is to be as follows:

Layer	Copper Weight (Pre-Plating)
Layer 01 (Top)	0.5oz
Layer 02 (Bottom)	0.5oz

Finished board thickness to be 1.6mm 0.1mm

Impedance Control

Not required.

Copper Thieving/Balancing

The supplier may not add copper thieving/balancing.

Finish

A.) Conductive finish

Plating to be immersion gold.

B.) Soldermask

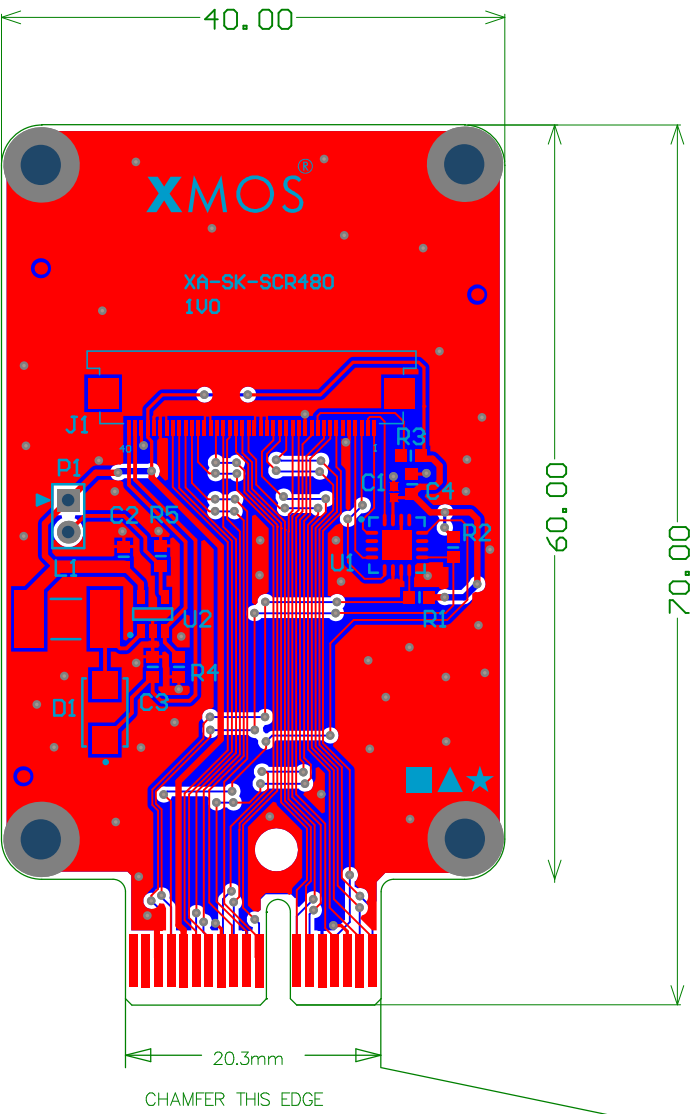
Liquid photo imageable soldermask (green). Pads have not been oversized.
Supplier should oversize soldermask on pads to suit process.

C.) Silkscreen

Colour white. Supplier should remove any silkscreen which overhangs pads.

Drill Data

Drill data is in Excellon format, metric (000.000), no zero suppression, absolute coordinates.
Hole size is finished size.



LAYER – FABRICATION INSTRUCTIONS
PCB COPPER LAYER 1 (TOP) SILKSCREEN TOP
PCB COPPER LAYER 2 (BOTTOM)

XMOS LTD = XIPCB-001 = 1V1 = 7 DECEMBER 2012

Xmos

Project Name XIPCB-001 (XA-SK-SDRAM)		
Sheet A4	Date 7 DECEMBER 2012	Revision 1V1
Copyright (c) 2012 XMOS Ltd. Confidential information. All rights reserved.		

PCB Manufacturing Notes

General Info

Board dimensions – 40mm x 70mm
Number of layers – 2
Smallest hole – 0.3mm
Number of holes – Approx 120
Minimum Track & Gap – 0.15mm
RoHS/Lead Free – Yes
Material – FR4 or equivalent

Stackup

Stackup is to be as follows:

Layer	Copper Weight (Pre-Plating)
Layer 01 (Top)	0.5oz
	0.5oz

Finished board thickness to be 1.6mm 0.1mm

Impedance Control

Not required.

Copper Thieving/Balancing

The supplier may not add copper thieving/balancing.

Finish

A.) Conductive finish

Plating to be immersion gold.

B.) Soldermask

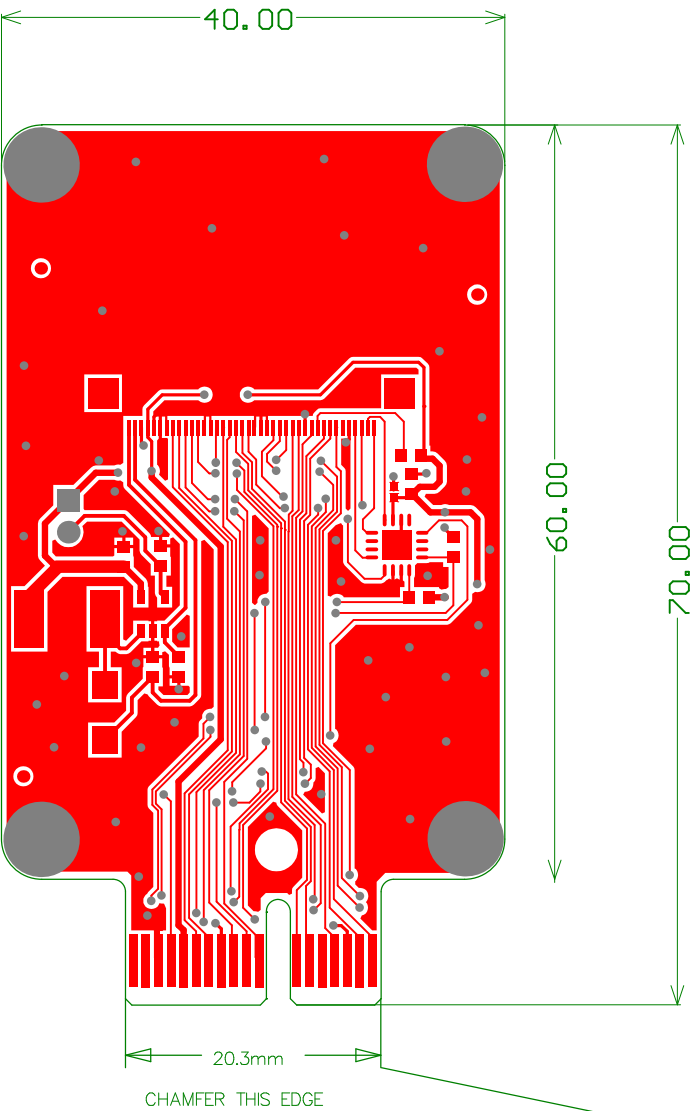
Liquid photo imageable soldermask (green). Pads have not been oversized.
Supplier should oversize soldermask on pads to suit process.

C.) Silkscreen

Colour white. Supplier should remove any silkscreen which overhangs pads.

Drill Data

Drill data is in Excellon format, metric (000.000), no zero suppression, absolute coordinates.
Hole size is finished size.



FABRICATION INSTRUCTIONS
PCB COPPER LAYER 1 (TOP)

XMOS®

Project Name		
XIPCB-001 (XA-SK-SDRAM)		
Sheet	Date	Revision
A4	7 DECEMBER 2012	1V1

Copyright (c) 2012 XMOS Ltd.
Confidential information. All rights reserved.

PCB Manufacturing Notes

General Info

Board dimensions – 40mm x 70mm
Number of layers – 2
Smallest hole – 0.3mm
Number of holes – Approx 120
Minimum Track & Gap – 0.15mm
RoHS/Lead Free – Yes
Material – FR4 or equivalent

Stackup

Stackup is to be as follows:

Layer	Copper Weight (Pre-Plating)
	0.5oz
Layer 02 (Bottom)	0.5oz

Finished board thickness to be 1.6mm 0.1mm

Impedance Control

Not required.

Copper Thieving/Balancing

The supplier may not add copper thieving/balancing.

Finish

A.) Conductive finish

Plating to be immersion gold.

B.) Soldermask

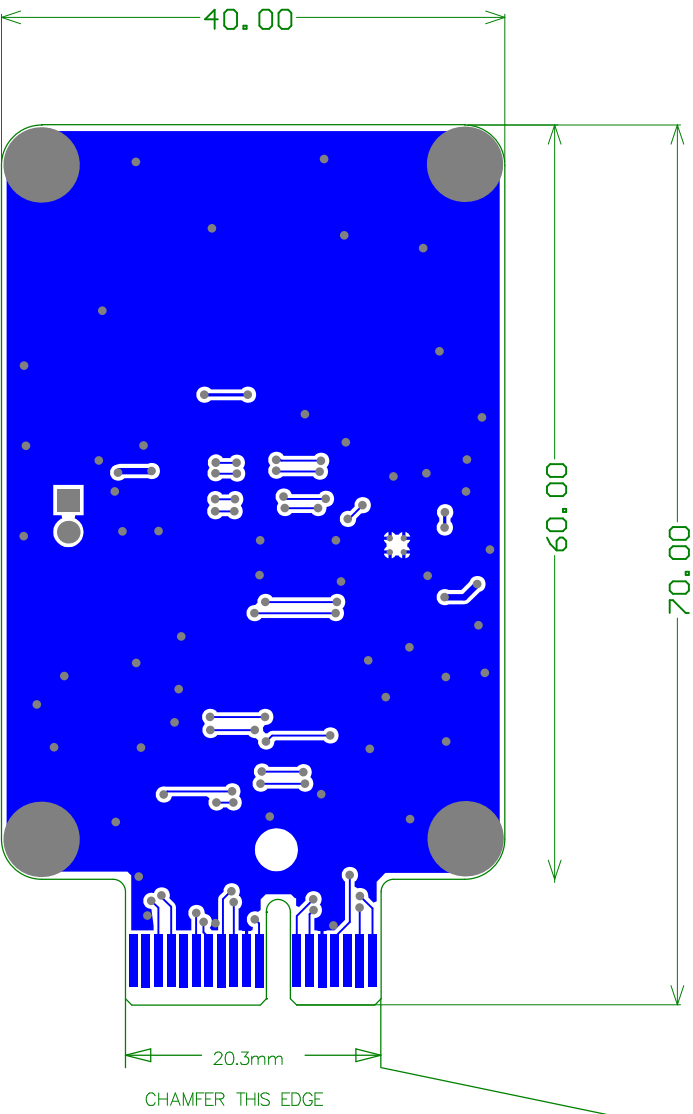
Liquid photo imageable soldermask (green). Pads have not been oversized.
Supplier should oversize soldermask on pads to suit process.

C.) Silkscreen

Colour white. Supplier should remove any silkscreen which overhangs pads.

Drill Data

Drill data is in Excellon format, metric (000.000), no zero suppression, absolute coordinates.
Hole size is finished size.



FABRICATION INSTRUCTIONS

PCB COPPER LAYER 2 (BOTTOM)

XMOS[®]

Project Name XIPCB-001 (XA-SK-SDRAM)		
Sheet A4	Date 7 DECEMBER 2012	Revision 1V1
Copyright (c) 2012 XMOS Ltd. Confidential information. All rights reserved.		

PCB Manufacturing Notes

General Info

Board dimensions – 40mm x 70mm
Number of layers – 2
Smallest hole – 0.3mm
Number of holes – Approx 120
Minimum Track & Gap – 0.15mm
RoHS/Lead Free – Yes
Material – FR4 or equivalent

Stackup

Stackup is to be as follows:

Layer	Copper Weight (Pre-Plating)
	0.5oz
	0.5oz

Finished board thickness to be 1.6mm 0.1mm

Impedance Control

Not required.

Copper Thieving/Balancing

The supplier may not add copper thieving/balancing.

Finish

A.) Conductive finish

Plating to be immersion gold.

B.) Soldermask

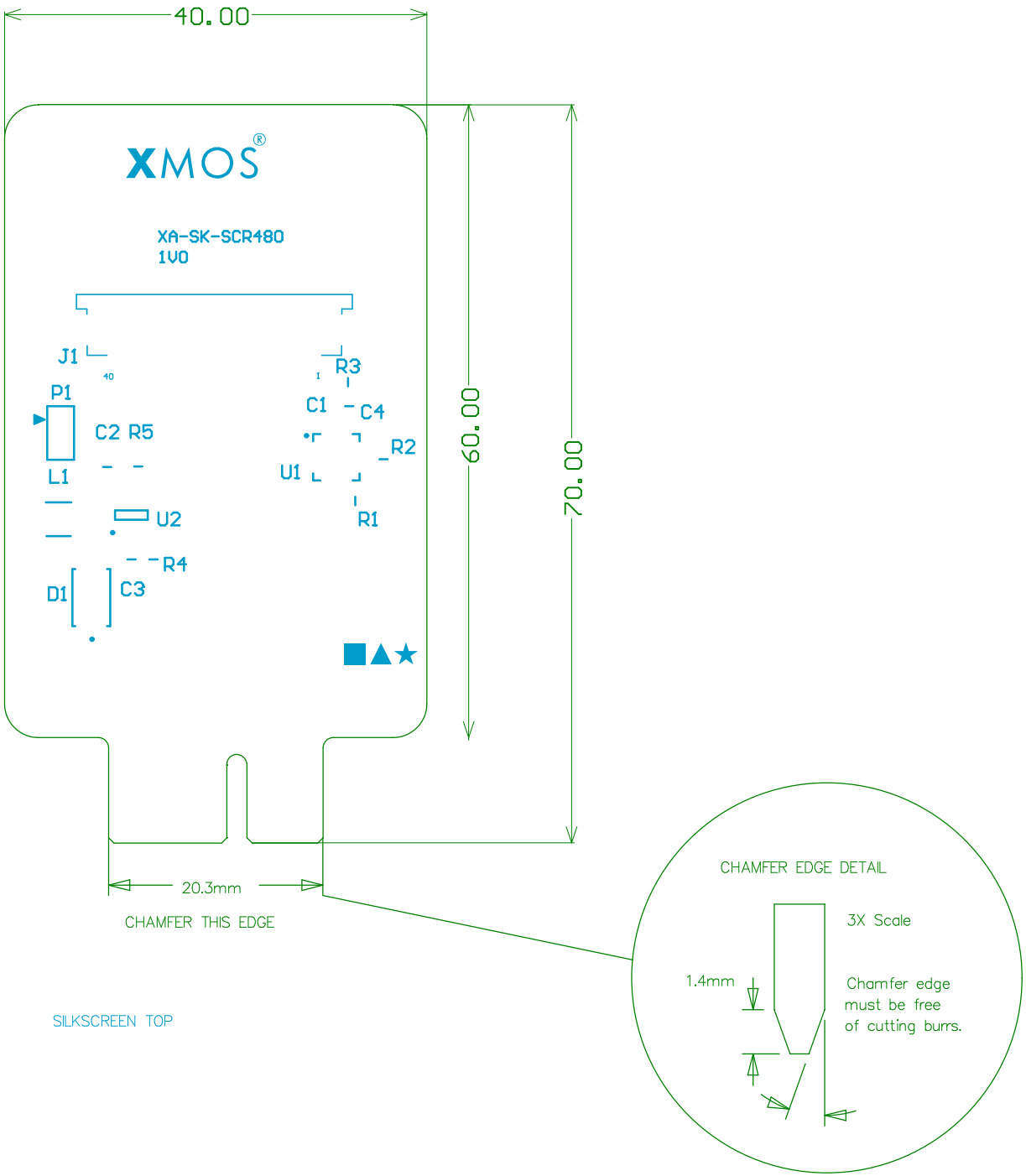
Liquid photo imageable soldermask (green). Pads have not been oversized.
Supplier should oversize soldermask on pads to suit process.

C.) Silkscreen

Colour white. Supplier should remove any silkscreen which overhangs pads.

Drill Data

Drill data is in Excellon format, metric (000.000), no zero suppression, absolute coordinates.
Hole size is finished size.



FABRICATION INSTRUCTIONS

SILKSCREEN TOP



Project Name		
XIPCB-001 (XA-SK-SDRAM)		
Sheet	Date	Revision
A4	7 DECEMBER 2012	1V1
Copyright (c) 2012 XMOS Ltd. Confidential information. All rights reserved.		

PCB Manufacturing Notes

General Info

Board dimensions – 40mm x 70mm
Number of layers – 2
Smallest hole – 0.3mm
Number of holes – Approx 120
Minimum Track & Gap – 0.15mm
RoHS/Lead Free – Yes
Material – FR4 or equivalent

Stackup

Stackup is to be as follows:

Layer	Copper Weight (Pre-Plating)
	0.5oz
	0.5oz

Finished board thickness to be 1.6mm 0.1mm

Impedance Control

Not required.

Copper Thieving/Balancing

The supplier may not add copper thieving/balancing.

Finish

A.) Conductive finish

Plating to be immersion gold.

B.) Soldermask

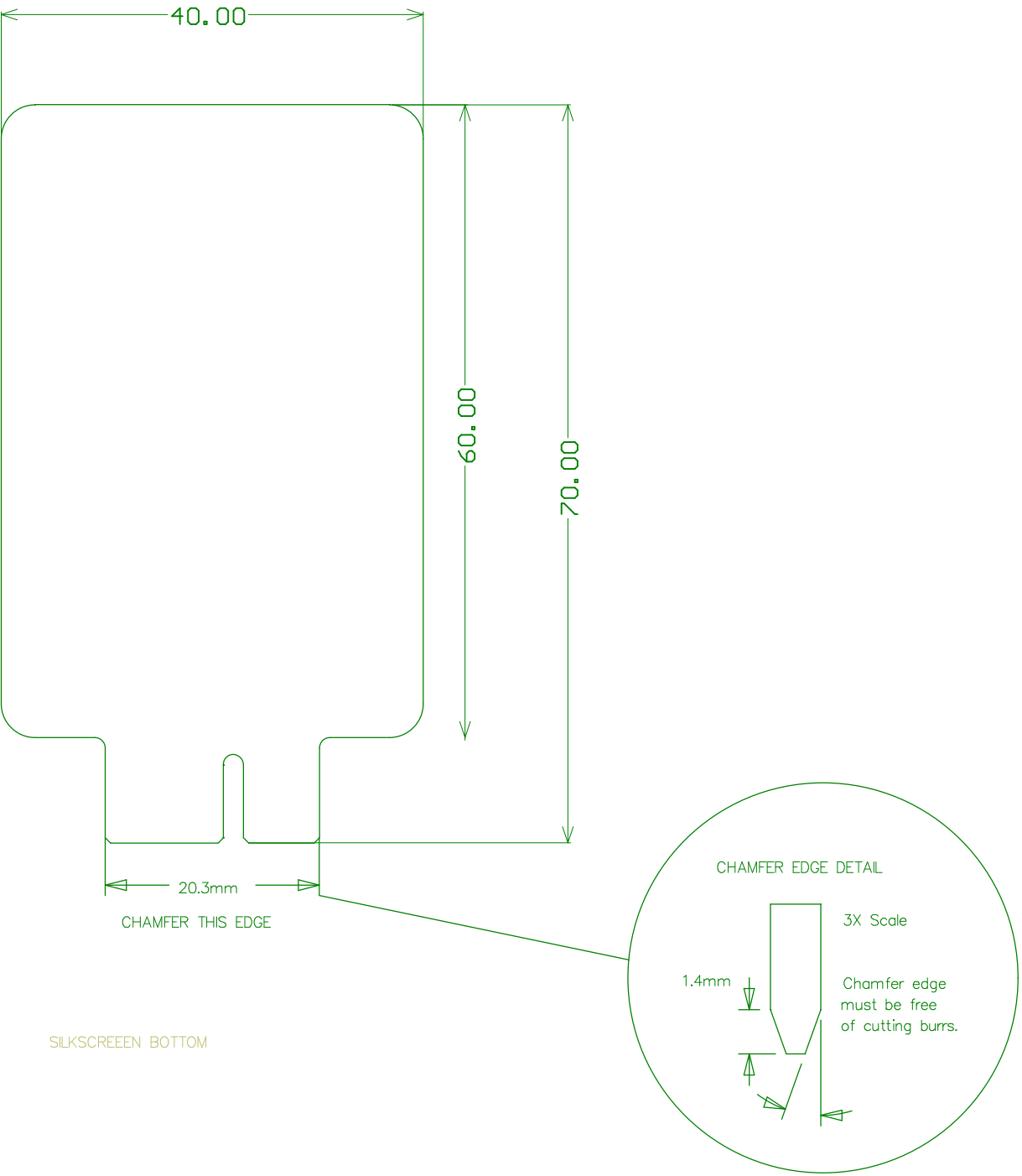
Liquid photo imageable soldermask (green). Pads have not been oversized.
Supplier should oversize soldermask on pads to suit process.

C.) Silkscreen

Colour white. Supplier should remove any silkscreen which overhangs pads.

Drill Data

Drill data is in Excellon format, metric (000.000), no zero suppression, absolute coordinates.
Hole size is finished size.



FABRICATION INSTRUCTIONS

SILKSCREEN BOTTOM



Project Name		
XIPCB-001 (XA-SK-SDRAM)		
Sheet	Date	Revision
A4	7 DECEMBER 2012	1V1
Copyright (c) 2012 XMOS Ltd. Confidential information. All rights reserved.		

PCB Manufacturing Notes

General Info

Board dimensions – 40mm x 70mm
Number of layers – 2
Smallest hole – 0.3mm
Number of holes – Approx 120
Minimum Track & Gap – 0.15mm
RoHS/Lead Free – Yes
Material – FR4 or equivalent

Stackup

Stackup is to be as follows:

Layer	Copper Weight (Pre-Plating)
	0.5oz
	0.5oz

Finished board thickness to be 1.6mm ±0.1mm

Impedance Control

Not required.

Copper Thieving/Balancing

The supplier may not add copper thieving/balancing.

Finish

A.) Conductive finish

Plating to be immersion gold.

B.) Soldermask

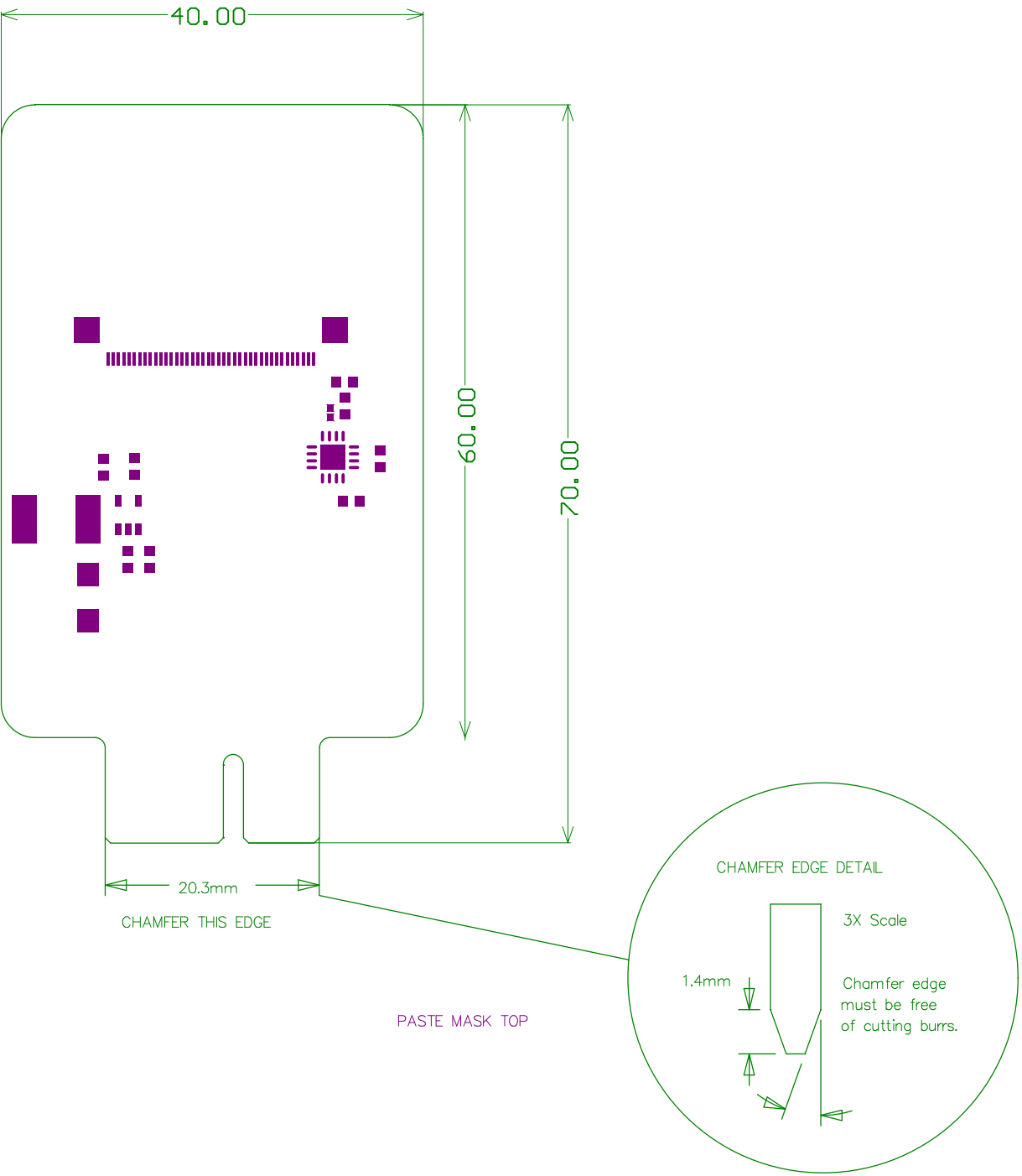
Liquid photo imageable soldermask (green). Pads have not been oversized.
Supplier should oversize soldermask on pads to suit process.

C.) Silkscreen

Colour white. Supplier should remove any silkscreen which overhangs pads.

Drill Data

Drill data is in Excellon format, metric (000.000), no zero suppression, absolute coordinates.
Hole size is finished size.



FABRICATION INSTRUCTIONS

Project Name XIPCB-001 (XA-SK-SDRAM)		
Sheet A4	Date 7 DECEMBER 2012	Revision 1V1
Copyright (c) 2012 XMOS Ltd. Confidential information. All rights reserved.		

PCB Manufacturing Notes

General Info

Board dimensions – 40mm x 70mm
Number of layers – 2
Smallest hole – 0.3mm
Number of holes – Approx 120
Minimum Track & Gap – 0.15mm
RoHS/Lead Free – Yes
Material – FR4 or equivalent

Stackup

Stackup is to be as follows:

Layer	Copper Weight (Pre-Plating)
	0.5oz
	0.5oz

Finished board thickness to be 1.6mm 0.1mm

Impedance Control

Not required.

Copper Thieving/Balancing

The supplier may not add copper thieving/balancing.

Finish

A.) Conductive finish

Plating to be immersion gold.

B.) Soldermask

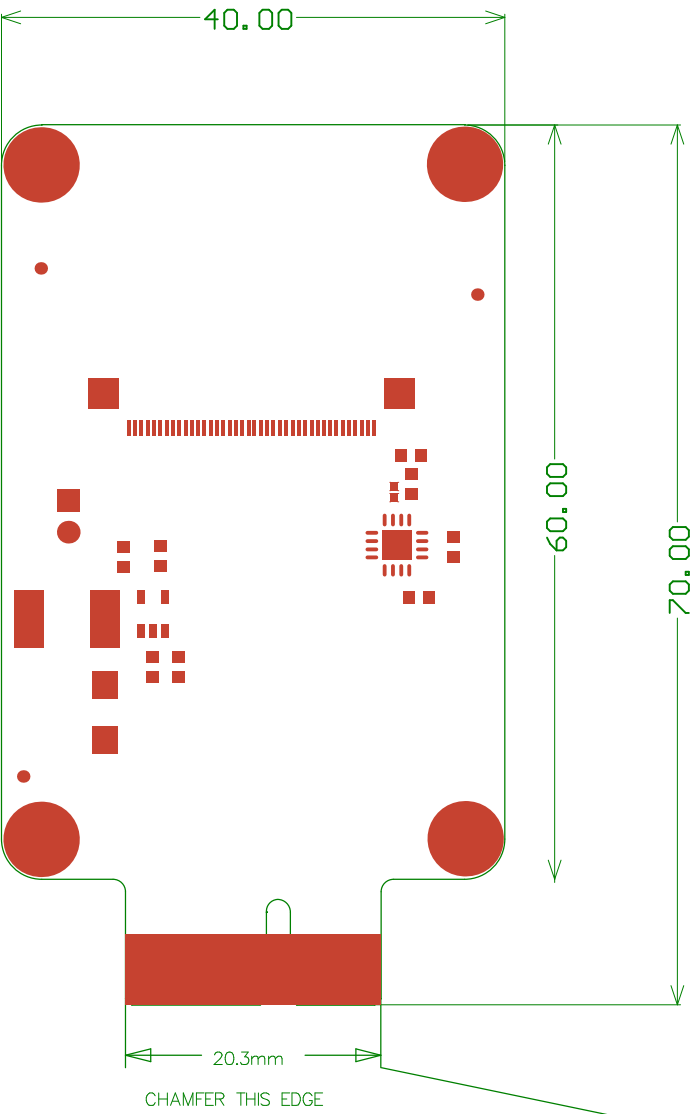
Liquid photo imageable soldermask (green). Pads have not been oversized.
Supplier should oversize soldermask on pads to suit process.

C.) Silkscreen

Colour white. Supplier should remove any silkscreen which overhangs pads.

Drill Data

Drill data is in Excellon format, metric (000.000), no zero suppression, absolute coordinates.
Hole size is finished size.



FABRICATION INSTRUCTIONS

SOLDER MASK TOP



Project Name		
XIPCB-001 (XA-SK-SDRAM)		
Sheet	Date	Revision
A4	7 DECEMBER 2012	1V1

Copyright (c) 2012 XMOS Ltd.
Confidential information. All rights reserved.

PCB Manufacturing Notes

General Info

Board dimensions – 40mm x 70mm
Number of layers – 2
Smallest hole – 0.3mm
Number of holes – Approx 120
Minimum Track & Gap – 0.15mm
RoHS/Lead Free – Yes
Material – FR4 or equivalent

Stackup

Stackup is to be as follows:

Layer	Copper Weight (Pre-Plating)
	0.5oz
	0.5oz

Finished board thickness to be 1.6mm 0.1mm

Impedance Control

Not required.

Copper Thieving/Balancing

The supplier may not add copper thieving/balancing.

Finish

A.) Conductive finish

Plating to be immersion gold.

B.) Soldermask

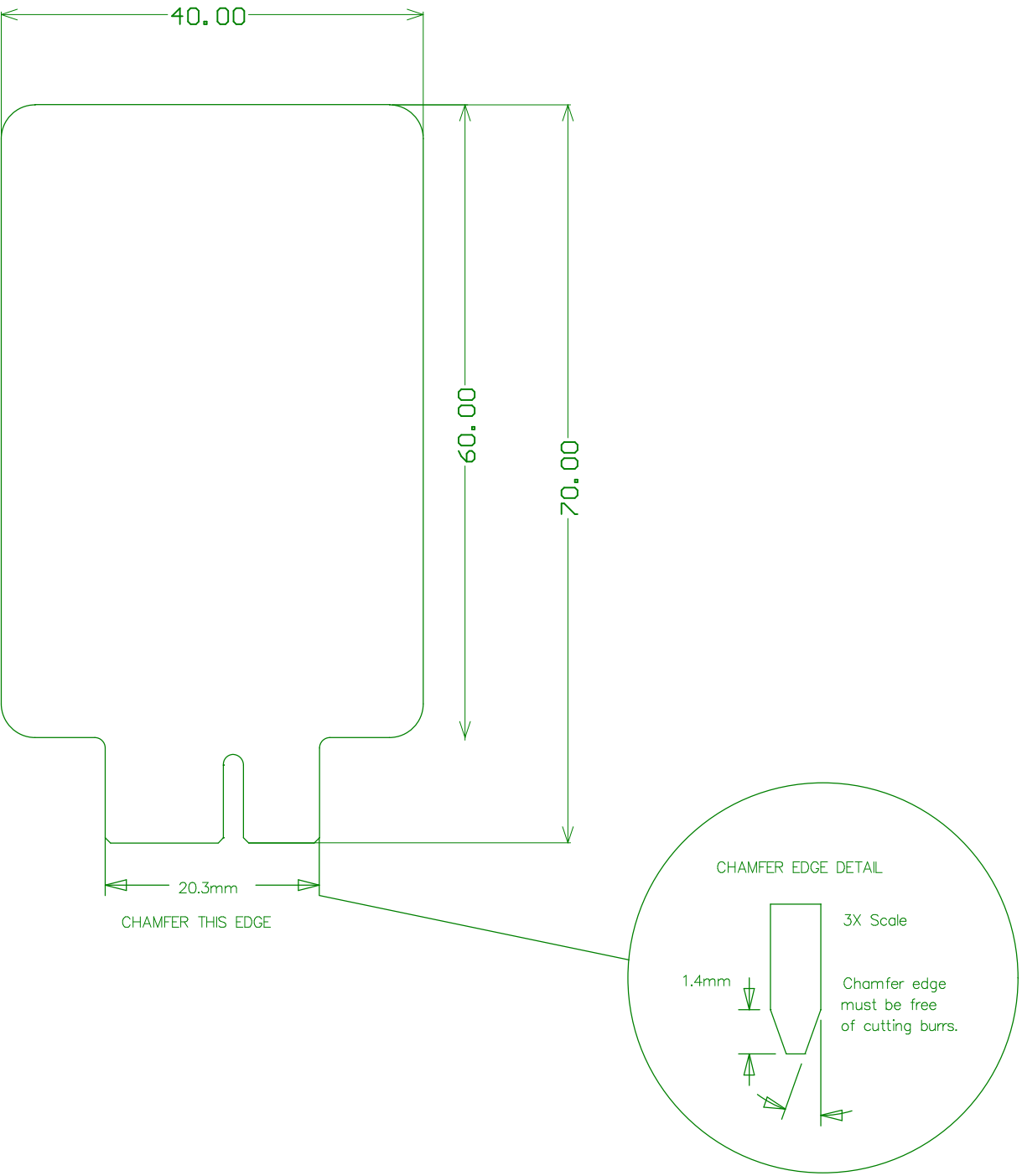
Liquid photo imageable soldermask (green). Pads have not been oversized.
Supplier should oversize soldermask on pads to suit process.

C.) Silkscreen

Colour white. Supplier should remove any silkscreen which overhangs pads.

Drill Data

Drill data is in Excellon format, metric (000.000), no zero suppression, absolute coordinates.
Hole size is finished size.



FABRICATION INSTRUCTIONS



Project Name		
XIPCB-001 (XA-SK-SDRAM)		
Sheet	Date	Revision
A4	7 DECEMBER 2012	1V1
Copyright (c) 2012 XMOS Ltd. Confidential information. All rights reserved.		

PCB Manufacturing Notes

General Info

Board dimensions – 40mm x 70mm
Number of layers – 2
Smallest hole – 0.3mm
Number of holes – Approx 120
Minimum Track & Gap – 0.15mm
RoHS/Lead Free – Yes
Material – FR4 or equivalent

Stackup

Stackup is to be as follows:

Layer	Copper Weight (Pre-Plating)
	0.5oz
	0.5oz

Finished board thickness to be 1.6mm 0.1mm

Impedance Control

Not required.

Copper Thieving/Balancing

The supplier may not add copper thieving/balancing.

Finish

A.) Conductive finish

Plating to be immersion gold.

B.) Soldermask

Liquid photo imageable soldermask (green). Pads have not been oversized.
Supplier should oversize soldermask on pads to suit process.

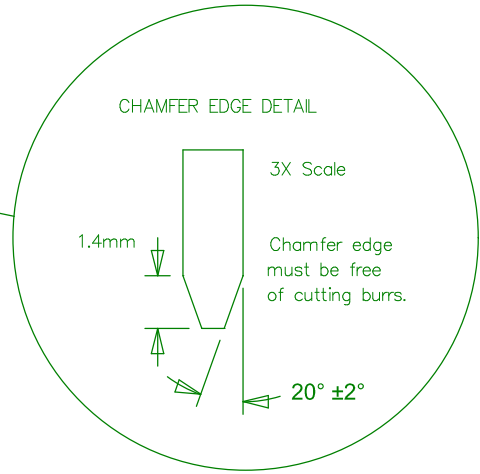
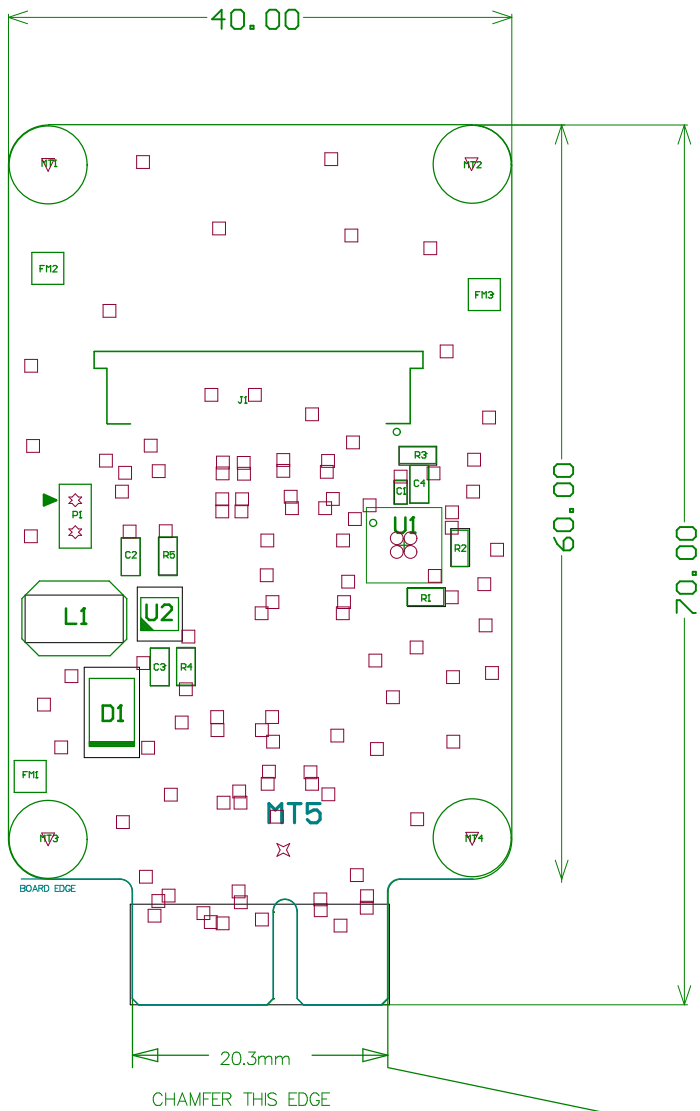
C.) Silkscreen

Colour white. Supplier should remove any silkscreen which overhangs pads.

Drill Data

Drill data is in Excellon format, metric (000.000), no zero suppression, absolute coordinates.
Hole size is finished size.

J2



FABRICATION INSTRUCTIONS

DRILL DRAWING

ASSEMBLY DRAWING TOP
ASSEMBLY DRAWING BOTTOM

Symbol	Hit Count	Tool Size	Plated	Hole Type
○	4	0.2mm (7.874mil)	PTH	Round
□	108	0.3mm (11.811mil)	PTH	Round
☆	2	1mm (39.37mil)	PTH	Round
✕	1	2.8mm (110.236mil)	NPTH	Round
▽	4	3.2mm (125.984mil)	PTH	Round
	119 Total			

Drill Drawing.

XMOS

Project Name		
XIPCB-001 (XA-SK-SDRAM)		
Sheet	Date	Revision
A4	7 DECEMBER 2012	1V1
Copyright (c) 2012 XMOS Ltd. Confidential information. All rights reserved.		

PCB Manufacturing Notes

General Info

Board dimensions – 40mm x 70mm
Number of layers – 2
Smallest hole – 0.3mm
Number of holes – Approx 120
Minimum Track & Gap – 0.15mm
RoHS/Lead Free – Yes
Material – FR4 or equivalent

Stackup

Stackup is to be as follows:

Layer	Copper Weight (Pre-Plating)
	0.5oz
	0.5oz

Finished board thickness to be 1.6mm 0.1mm

Impedance Control

Not required.

Copper Thieving/Balancing

The supplier may not add copper thieving/balancing.

Finish

A.) Conductive finish

Plating to be immersion gold.

B.) Soldermask

Liquid photo imageable soldermask (green). Pads have not been oversized.
Supplier should oversize soldermask on pads to suit process.

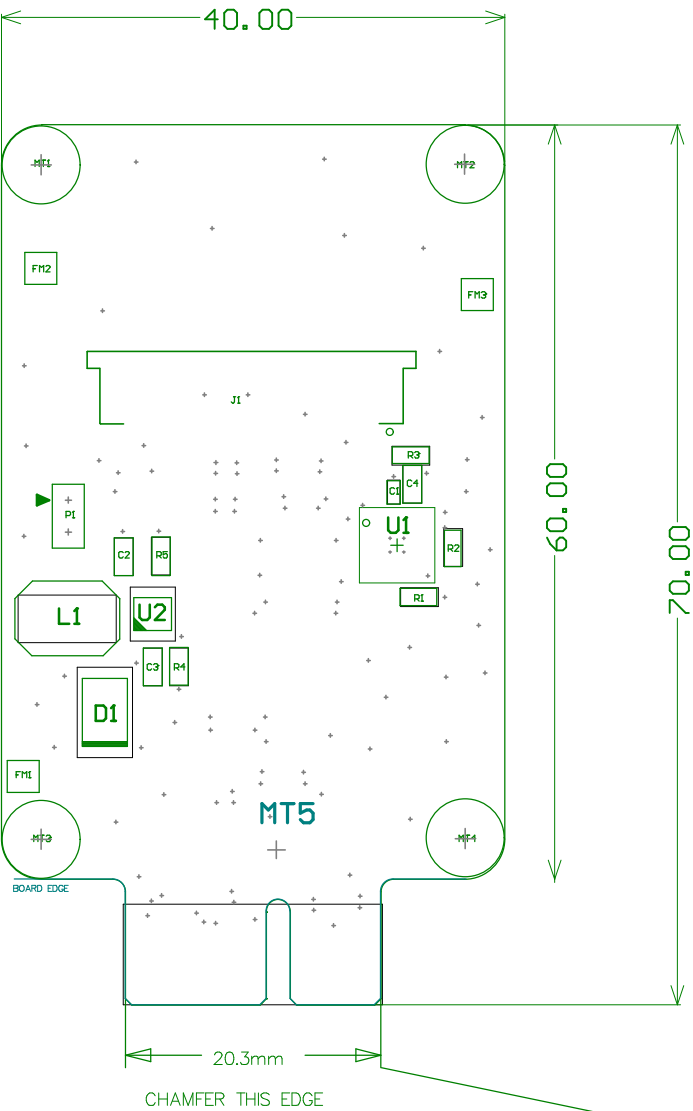
C.) Silkscreen

Colour white. Supplier should remove any silkscreen which overhangs pads.

Drill Data

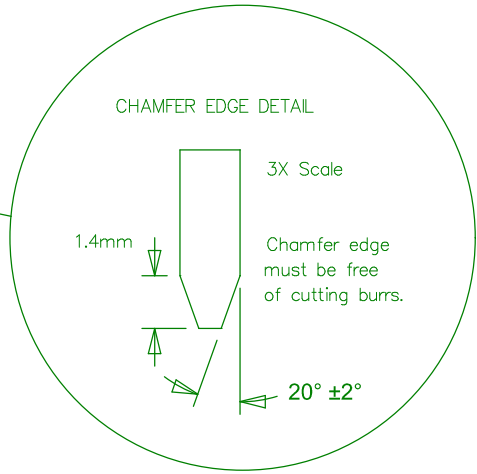
Drill data is in Excellon format, metric (000.000), no zero suppression, absolute coordinates.
Hole size is finished size.

J2



FABRICATION INSTRUCTIONS

ASSEMBLY DRAWING TOP
ASSEMBLY DRAWING BOTTOM



XMOS®

Project Name		
XIPCB-001 (XA-SK-SDRAM)		
Sheet	Date	Revision
A4	7 DECEMBER 2012	1V1
Copyright (c) 2012 XMOS Ltd. Confidential information. All rights reserved.		

BOM

SCR480 Slice

Source Data From:

Project:

Variant:

XA-SK-SCR480.PrjPCB

XA-SK-SCR480.PrjPCB

None



Report Date:

14/01/2013

16:16:50

Print Date:

14-Jan-13

4:16:54 PM

#	LibRef	Designator	Description	Quantity
1	E-01-0002	R3, R5	RES 10k 0603 1%	2
2	E-01-0021	R1, R2	RES 4.7k 0603 1%	2
3	E-01-0067	R4	RES 18R 0603 1%	1
4	E-02-0002	C1	MLCC 100nF 0402 X7R 16V	1
5	E-02-0005	C2	MLCC 4.7uF 0603 X5R 6.3V	1
6	E-02-0020	C4	MLCC 1uF 0603 X5R 10V	1
7	E-02-0050	C3	MLCC 1uF 0603 X5R 50V	1
8	E-09-0017	L1	Power Inductor, 47uH, 470mR	1
9	E-10-0016	D1	Schottky Diode, 40V, 1A, SMB	1
10	E-13-0120	U1	Touch Screen Controller, I2C, 16VTQP	1
11	E-13-0121	U2	LED BOOST CONVERTOR	1
12	E-18-0010	J1	Display, LCD TFT, Graphic, 480x272, RGB	1
13	P-01-0011	PROD1, PROD2, PROD3, PROD4	Feet, Nylon, M3, 6mm Standoff	4
Approved			Notes	18