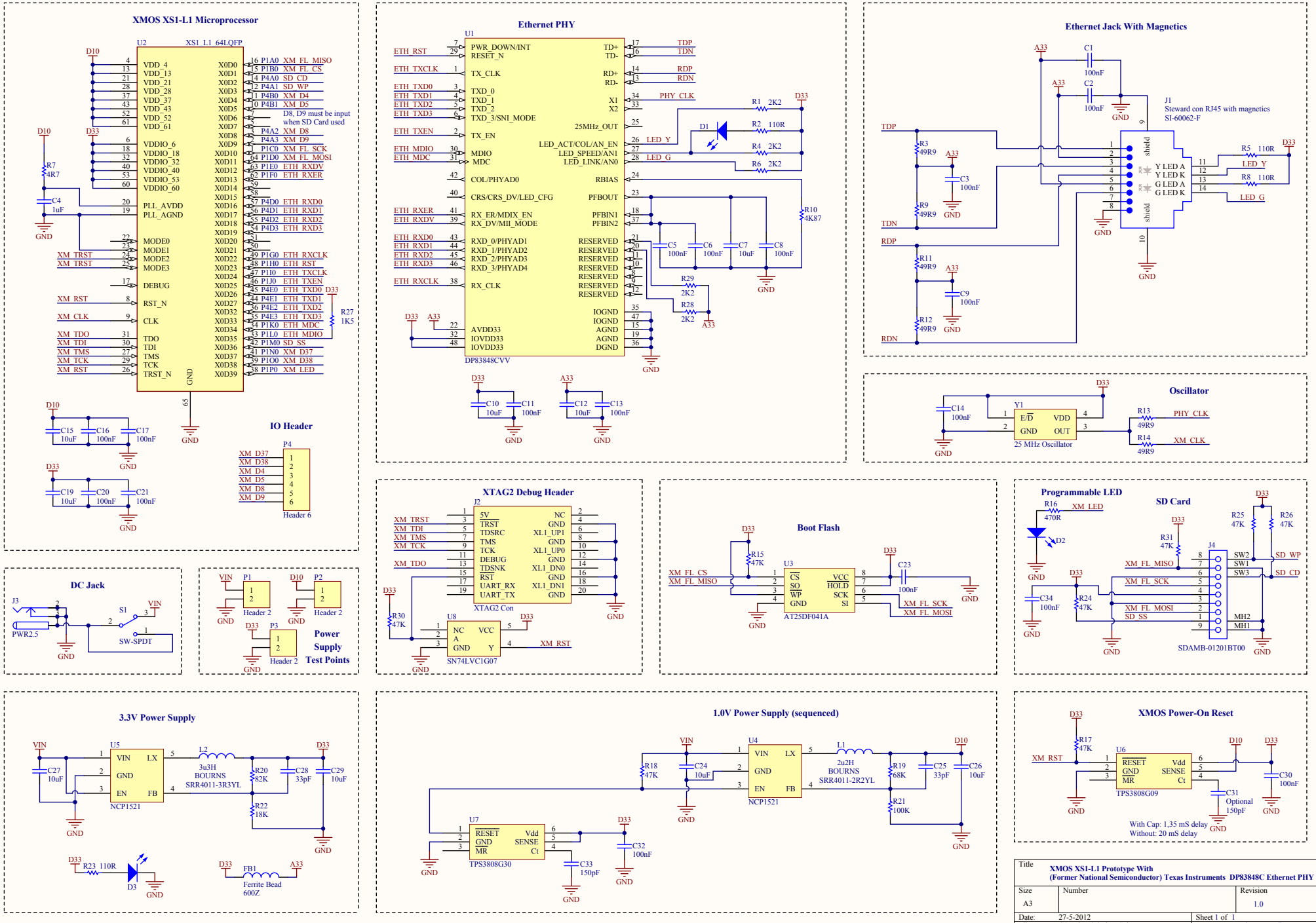

XMOS XS1-L1 Microprocessor
U2
XS1_L1_64LQFP
D8, D9 must be input when SD Card used
IO Header
P4
Header 6
Ethernet PHY
U1
DP83848CVV
XTAG2 Debug Header
J2
XTAG2 Con
Boot Flash
U3
AT25DF041A
Programmable LED
SD Card
J4
SDAMB-01201BT00
Ethernet Jack With Magnetics
J1
Steward con RJ45 with magnetics
SI-60062-F
Oscillator
25 MHz Oscillator
DC Jack
SW-SPDT
Power Supply Test Points
3.3V Power Supply
NCP1521
D3
Ferrite Bead
600Z
1.0V Power Supply (sequenced)
NCP1521
TPS3808G30
XMOS Power-On Reset
TPS3808G09
With Cap: 1,35 mS delay
Without: 20 mS delay
Title
XMOS XS1-L1 Prototype With
(Former National Semiconductor) Texas Instruments DP83848C Ethernet PHY
Size
A3
Number
Revision
1.0
Date:
27-5-2012
Sheet 1 of 1
File:
C:\projects\..\eth_a.SchDoc
Drawn By:
Bianco Zandbergen

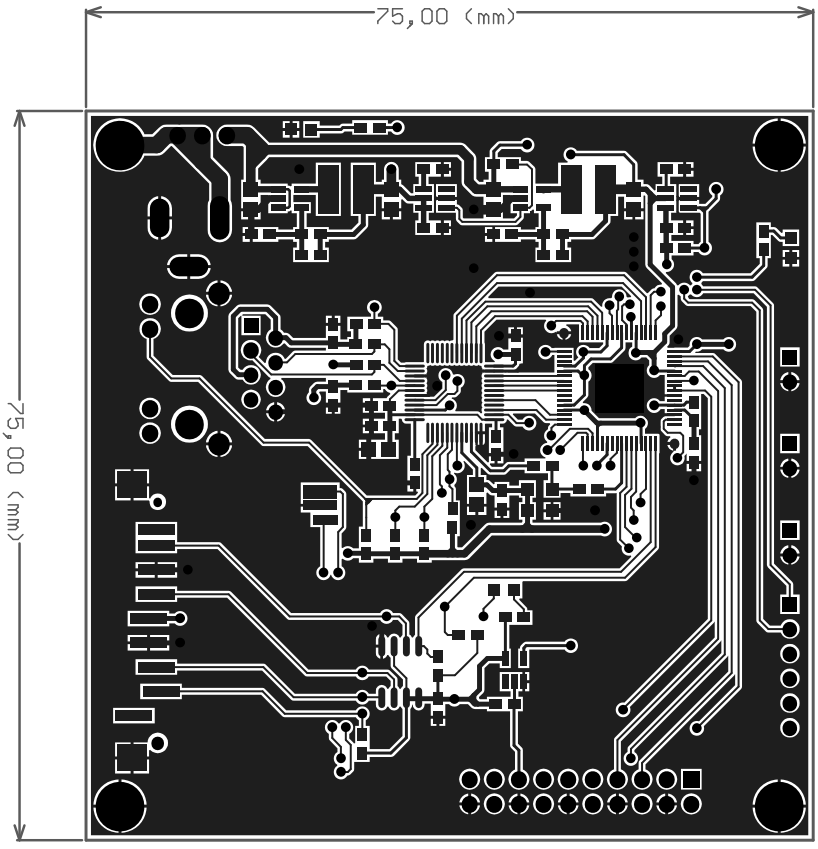
Bill of Materials

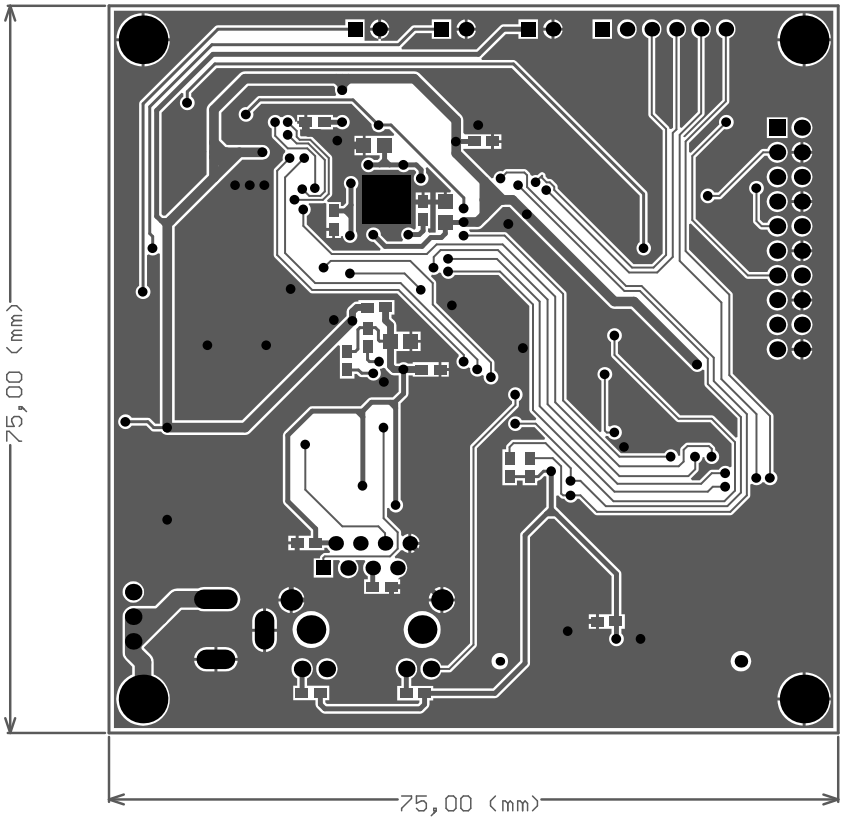
XMOS XS1-L1 DP83848C Ethernet PHY Prototype

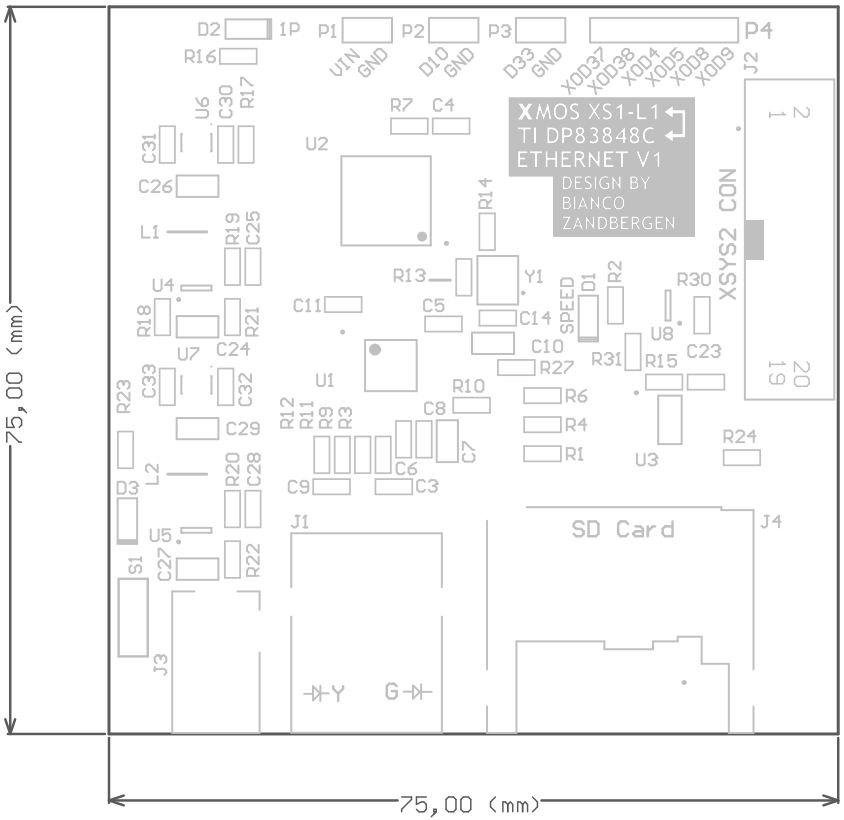
Source Data From: eth_a.SchDoc
Project: eth_a.PrjPCB
Variant: None

Creation Date: 27-5-2012 14:40:45
Print Date: 27-May-12 ########

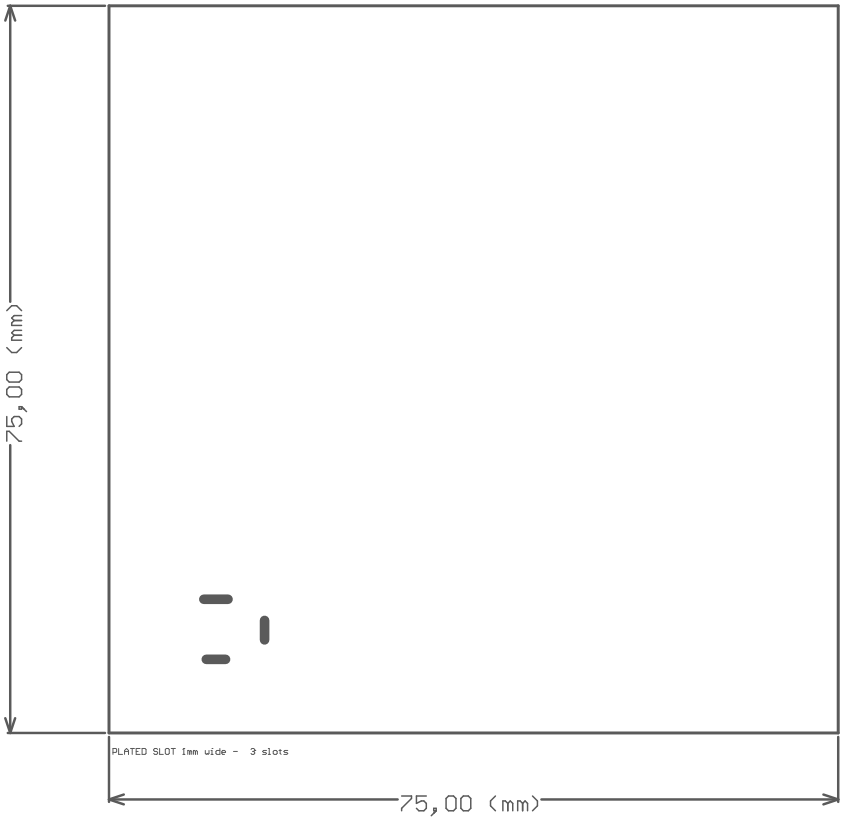
Description	Value	Quantity	Designator	Footprint	Manufacturer	ProductCode	Vendor	VendorCode	Price	Subtotal
4Mbit SPI Flash		1	U3	SOIC150-8_M	ATMEL	AT25DF041A-SSH-B	Farnell	1715441	1,60	1,60
Buck Converter		2	U4, U5	SOT23-5	ON SEMICONDUCTOR	NCP1521BSNT1G	Farnell	1432258	1,58	3,16
Buffer (open drain output)		1	U8	SOT23-5	TEXAS INSTRUMENTS	SN74LVC1G07DBV	Farnell	1102969	0,47	0,47
Capacitor	100nF	18	C1, C2, C3, C5, C6, C8, C9, C11, C13, C14, C16, C17, C20, C21, C23, C30, C32, C34	1608[0603]_CAP	MURATA	GRM188R71H104KA93D	Farnell	8820023	0,05	0,90
Capacitor	10uF	9	C7, C10, C12, C15, C19, C24, C26, C27, C29	2012[0805]_CAP	AVX	0805ZD106KAT2A	Farnell	1833812	0,12	1,08
Capacitor	150pF	2	C31, C33	1608[0603]_CAP	MURATA	GRM1885C1H151JA01D	Farnell	8819874	0,05	0,10
Capacitor	1uF	1	C4	1608[0603]_CAP	KEMET	C0603C105K4RACTU	Farnell	1650837	0,17	0,17
Capacitor	33pF	2	C25, C28	1608[0603]_CAP	MURATA	GRM1885C1H330JA01D	Farnell	1828910	0,03	0,06
Crystal Oscillator SMD 5mm x 3.2mm	25 MHz	1	Y1	OSC_32_50	TXC	7C-25.000MBB-T	Farnell	1842032	3,21	3,21
Ferrite Bead	600Z	1	FB1	1608[0603]_FB	MURATA	BLM18AG601SN1D	Farnell	1515679	0,06	0,06
Header, 2-Pin		3	P1, P2, P3	HDR1X2					0,00	0,00
Header, 6-Pin		1	P4	HDR1X6					0,00	0,00
Inductor	2u2H	1	L1	BOURNS_SRR4011	BOURNS	SRR4011-2R2YL	Farnell	1828153	1,04	1,04
Inductor	3u3H	1	L2	BOURNS_SRR4011	BOURNS	SRR4011-3R3YL	Farnell	1828154	0,27	0,27
Low Voltage Power Supply Connector		1	J3	KLD-0202	SWITCHCRAFT	RAPC722X	Farnell	1608727	1,58	1,58
Power on Reset controller 0.9V		1	U6	SOT23-6	TEXAS INSTRUMENTS	TPS3808G09DBVT	Farnell	1755527	2,45	2,45
Power on Reset controller 3.0V		1	U7	SOT23-6	TEXAS INSTRUMENTS	TPS3808G30DBVT	Farnell	1755533	2,45	2,45
Resistor	100K	1	R21	1608[0603]_RES	VISHAY DRALORIC	CRCW0603100KFKEA	Farnell	1469649	0,02	0,02
Resistor	110R	4	R2, R5, R8, R23	1608[0603]_RES	PANASONIC	ERJ3GEYJ111V	Farnell	2059576	0,01	0,04
Resistor	18K	1	R22	1608[0603]_RES	VISHAY DRALORIC	CRCW060318K0FKEAHP	Farnell	1738921	0,04	0,04
Resistor	1K5	1	R27	1608[0603]_RES	PANASONIC	ERJ3GEYJ152V	Farnell	2059606	0,01	0,01
Resistor	2K2	5	R1, R4, R6, R28, R29	1608[0603]_RES	YAGEO	RE0603DR-072K2L	Farnell	1840583	0,01	0,05
Resistor	470R	1	R16	1608[0603]_RES	BOURNS	CR0603-JW-471GLF	Farnell	2008354	0,02	0,02
Resistor	47K	8	R15, R17, R18, R24, R25, R26, R30, R31	1608[0603]_RES	VISHAY DRALORIC	CRCW060347K0FKEA	Farnell	1469811	0,02	0,16
Resistor	49R9	6	R3, R9, R11, R12, R13, R14	1608[0603]_RES	SUSUMU	RR0816Q-49R9-D-68R	Farnell	1612045	0,02	0,12
Resistor	4K87	1	R10	1608[0603]_RES	MULTICOMP	MC 0.063W 0603 1%	Farnell	1170858	0,02	0,02
Resistor	4R7	1	R7	1608[0603]_RES	PANASONIC	ERJ3GEYJ4R7V	Farnell	2059539	0,01	0,01
Resistor	68K	1	R19	1608[0603]_RES	PANASONIC	CRCW060368K0FKEA	Farnell	1469832	0,02	0,02
Resistor	82K	1	R20	1608[0603]_RES	VISHAY DRALORIC	CRCW060382K0FKEAHP	Farnell	1738930	0,04	0,04
Right Angle,RJ45-Keyed, Flange Mount PCB Jack		1	J1	Steward Con RJ45	STEWART CONNECTOR	SI-60062-F	Farnell	1137983	5,21	5,21
Secure Digital Card Connector, Type A without Cover		1	J4	SDCARD-SDAMB-012	MULTICOMP	SDAMB-01215BT00	Farnell	9186140	1,60	1,60
Single Port 10/100 Mb/s Ethernet PHY		1	U1	TSQFP50P900X900-48M	National Semiconductor	DP83848CVV	Farnell	1286816	4,89	4,89
SMD LED 0805	GREEN	1	D3	2012[0805]_LED	KINGBRIGHT	KPHCM-2012SGC-T	Farnell	1686074	0,16	0,16
SMD LED 0805	ORANGE	2	D1, D2	2012[0805]_LED	KINGBRIGHT	KPHCM-2012SECK	Farnell	1686068	0,16	0,32
SPDT Switch		1	S1	SIP-3	EAO	09.03201.02	Farnell	1608080	1,00	1,00
XMOS XS1-L1 Microprocessor		1	U2	XMOS_QFP50P1200X1200X160-65N	XMOS	XS1-L01A-LQ64-C5	Digikey	880-1032-ND	6,65	6,65
XTAG2 Connector		1	J2	IDC2.54-V20D	TYCO	2-1634688-0	Farnell	8395942	0,91	0,91
		87							EUR	39,89

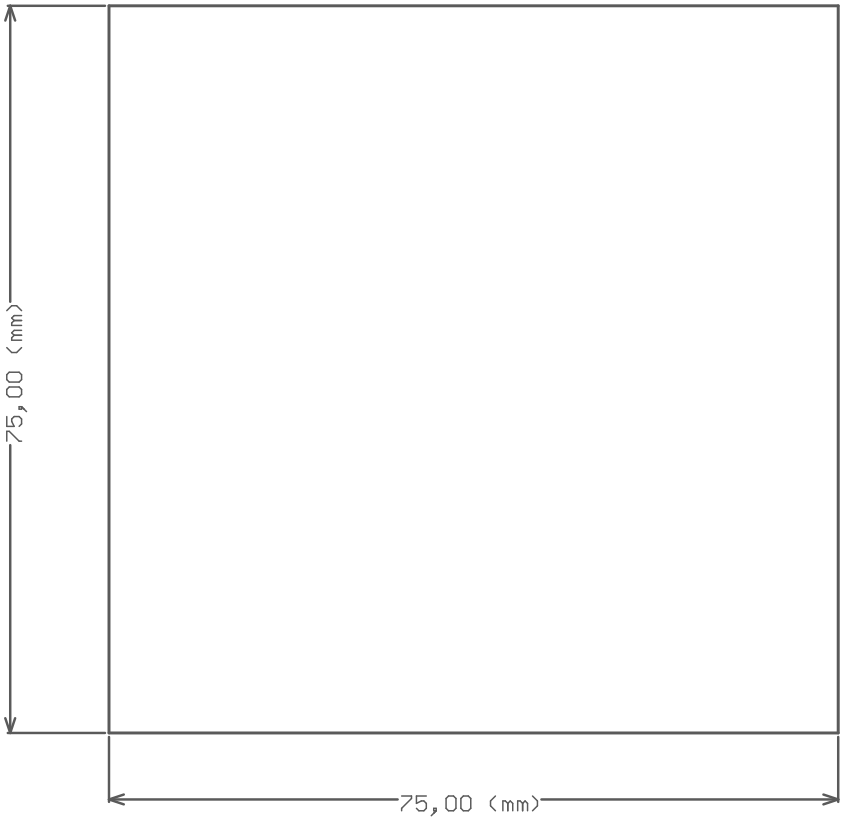

75,00 (mm)
75,00 (mm)

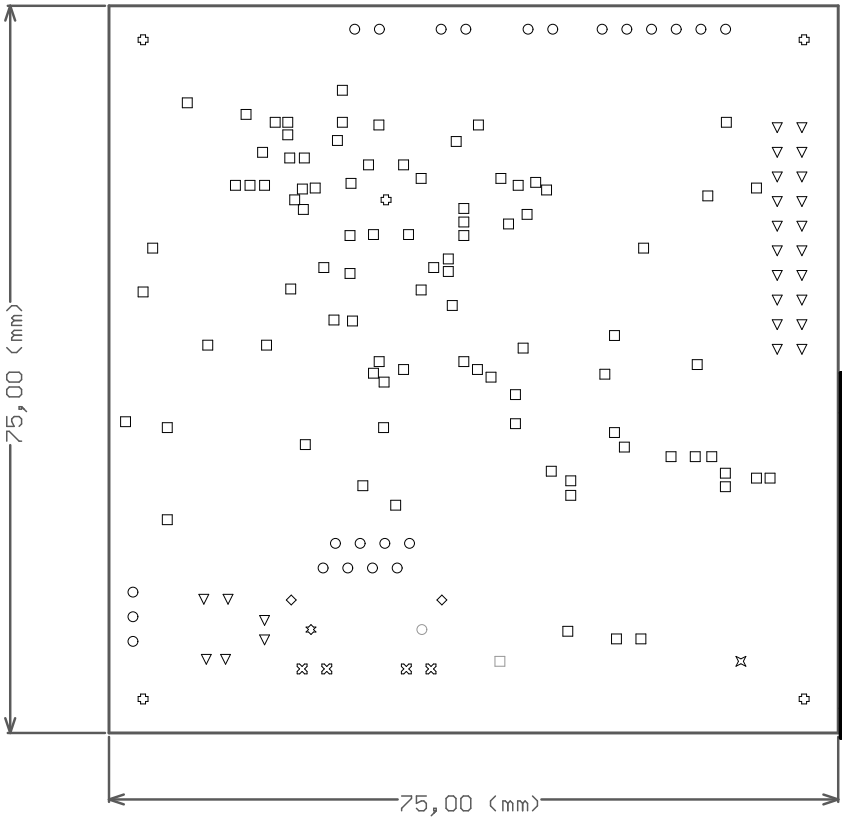

75,00 (mm)
75,00 (mm)


XMOS XS1-L1
TI DP83848C
ETHERNET V1
DESIGN BY
BIANCO
ZANDBERGEN
XSYS2 CON
SD Card
P1
P2
P3
P4
VIN
GND
D10
GND
D33
GND
XOD37
XOD38
XOD4
XOD5
XOD8
XOD9
J1
J2
J3
J4
U1
U2
U3
U4
U5
U6
U7
U8
Y1
SPEED
75,00 (mm)
75,00 (mm)

GND
C20
C15
C16
C21
C17
C19
TRST
TDI
TMS
TCK
TDO
RST
GND
FB1
C12
C13
R28
R29
R32
R33
C2
C1
C34
GND
DC IN
R5
R8
75,00 (mm)
75,00 (mm)

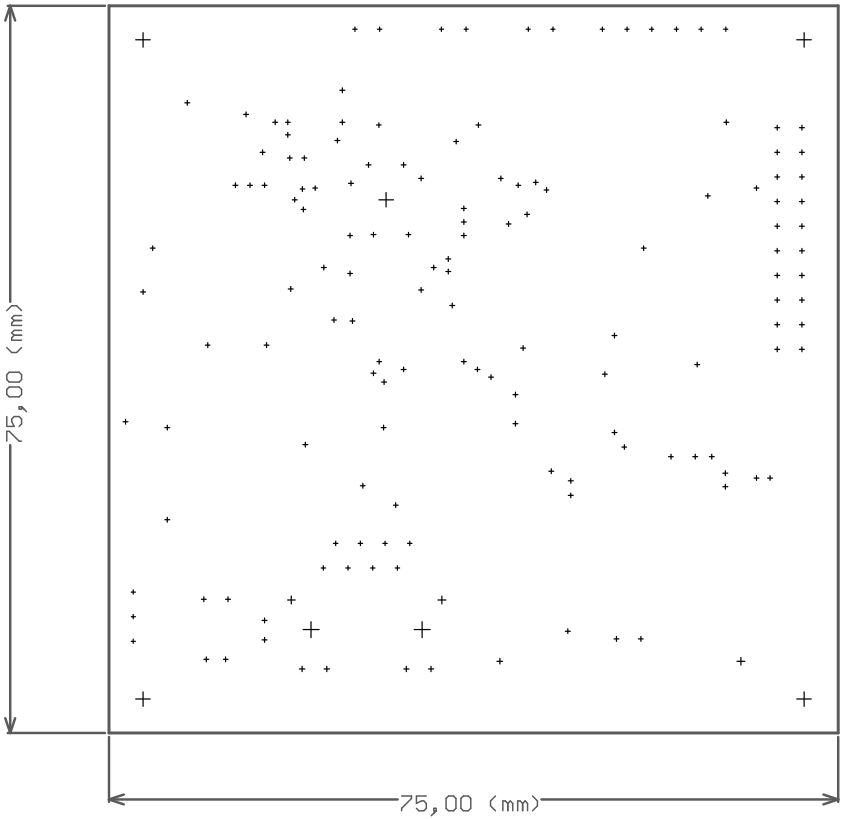

75,00 (mm)
PLATED SLOT 1mm wide - 3 slots
75,00 (mm)

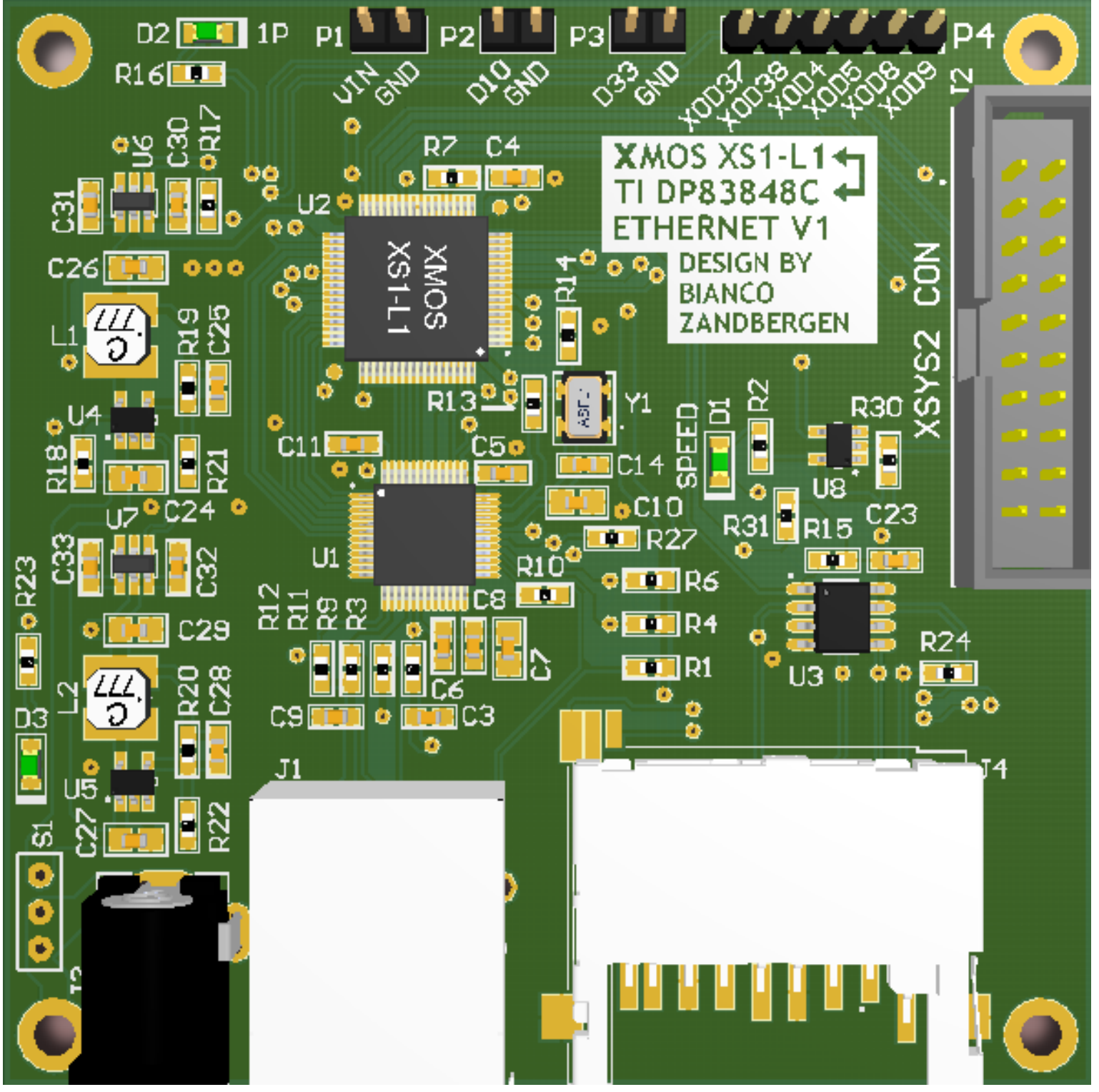

75,00 (mm)
75,00 (mm)

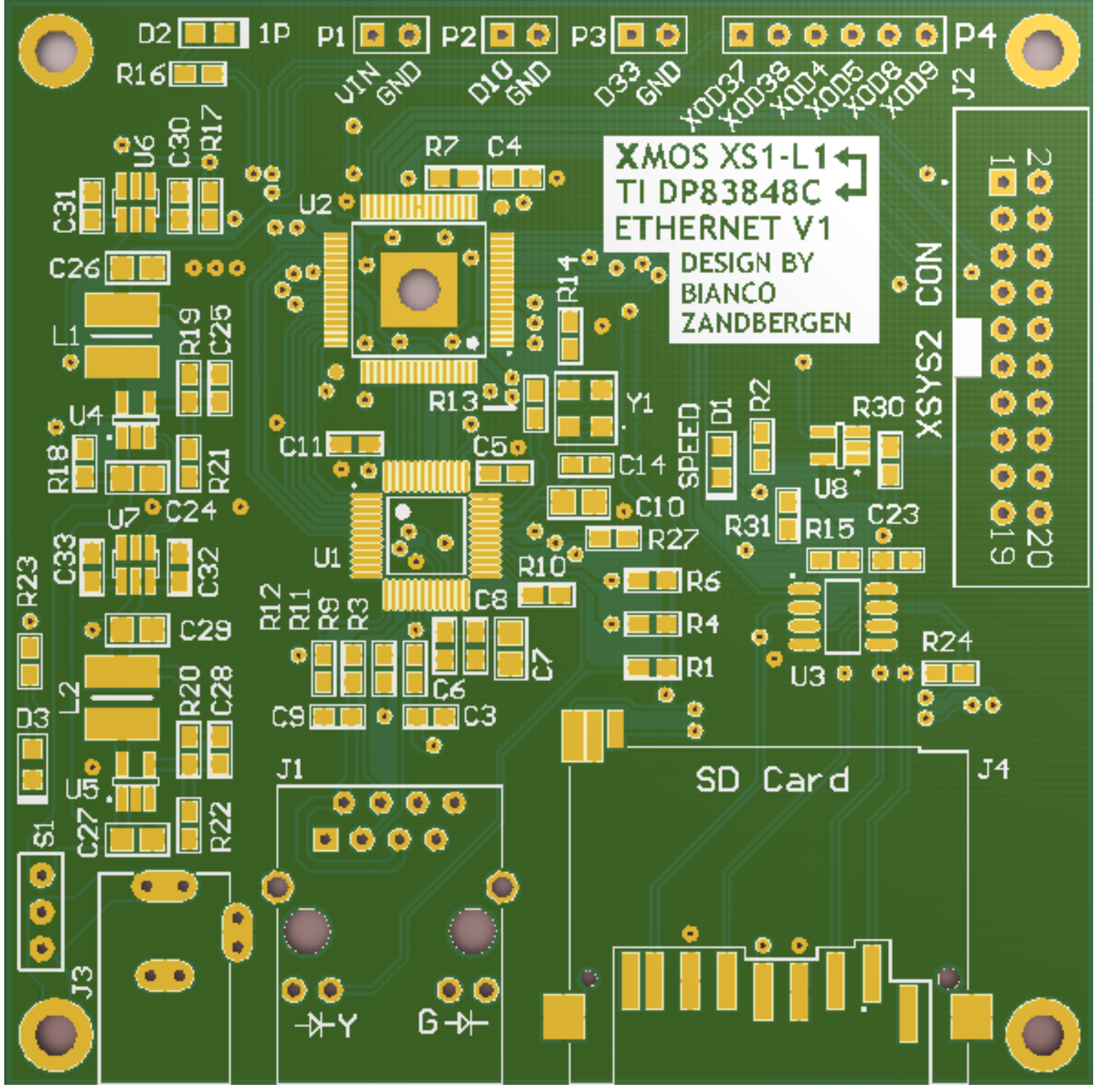


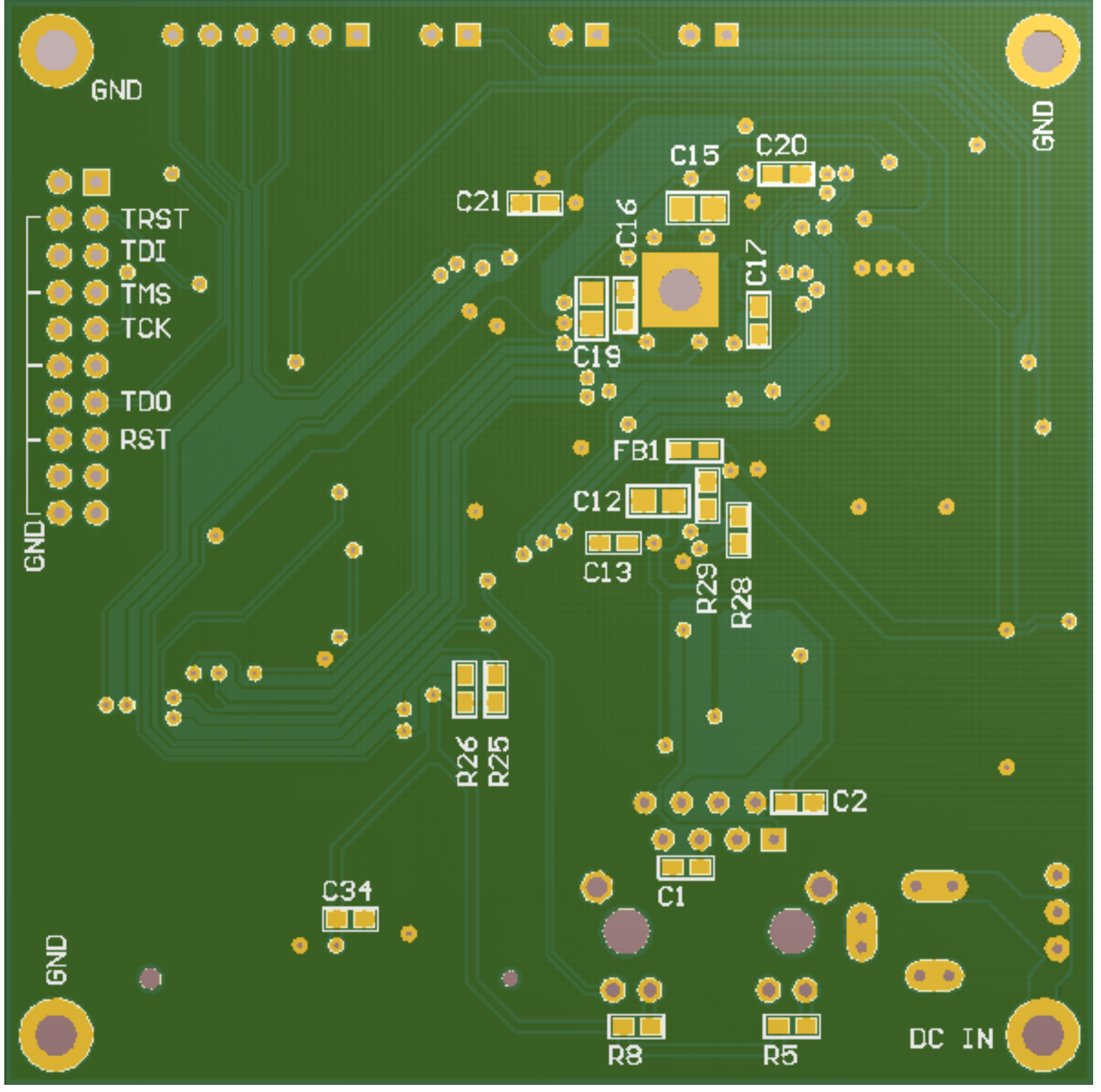
Symbol	Hit Count	Tool Size	Plated	Hole Type
□	90	0.5mm (19.685mil)	PTH	Round
○	23	0.9mm (35.433mil)	PTH	Round
▽	26	1mm (39.37mil)	PTH	Round
⊠	4	1.1mm (43.307mil)	PTH	Round
□	1	1.2mm (47.244mil)	NPTH	Round
◇	2	1.6mm (62.992mil)	PTH	Round
⊠	1	1.6mm (62.992mil)	NPTH	Round
✪	5	3mm (118.11mil)	PTH	Round
✪	1	3.3mm (129.921mil)	NPTH	Round
○	1	3.3mm (129.925mil)	NPTH	Round
	154 Total			

Drill Drawing.


75,00 (mm)
75,00 (mm)


XMOS XS1-L1
TI DP83848C
ETHERNET V1
DESIGN BY
BIANCO
ZANDBERGEN
XMOS
XS1-L1
XSYS2 CON
D2
1P
P1
P2
P3
P4
VIN
GND
D10
GND
D33
GND
XOD37
XOD38
XOD4
XOD5
XOD8
XOD9
T2
R16
R7
C4
U2
U6
C30
R17
C31
C26
L1
R19
C25
R14
R13
Y1
U4
R18
R21
C11
C5
C14
SPEED
D1
R2
R30
U8
C24
U7
C10
R27
R31
R15
C23
C33
C32
U1
R10
R6
R23
R12
R11
R9
R3
C8
R4
C29
C7
R24
L2
R20
C28
C6
R1
U3
D3
C9
C3
J1
J4
U5
C27
R22
S1


XMOS XS1-L1
TI DP83848C
ETHERNET V1
DESIGN BY
BIANCO
ZANDBERGEN
SD Card
XSYS2 CON
SPEED
D2
1P
P1
P2
P3
P4
VIN
GND
D10
D33
XOD37
XOD38
XOD4
XOD5
XOD8
XOD9
J2
J1
J3
J4
S1
U1
U2
U3
U4
U5
U6
U7
U8
Y1
L1
L2
D1
D3
R1
R2
R3
R4
R6
R7
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R21
R22
R23
R24
R27
R30
R31
C3
C4
C5
C6
C7
C8
C9
C10
C11
C14
C23
C24
C25
C26
C27
C28
C29
C30
C31
C32
C33


GND
GND
TRST
TDI
TMS
TCK
TDO
RST
GND
C15
C20
C21
C16
C17
C19
FB1
C12
C13
R29
R28
R26
R25
C2
C1
C34
GND
R8
R5
DC IN