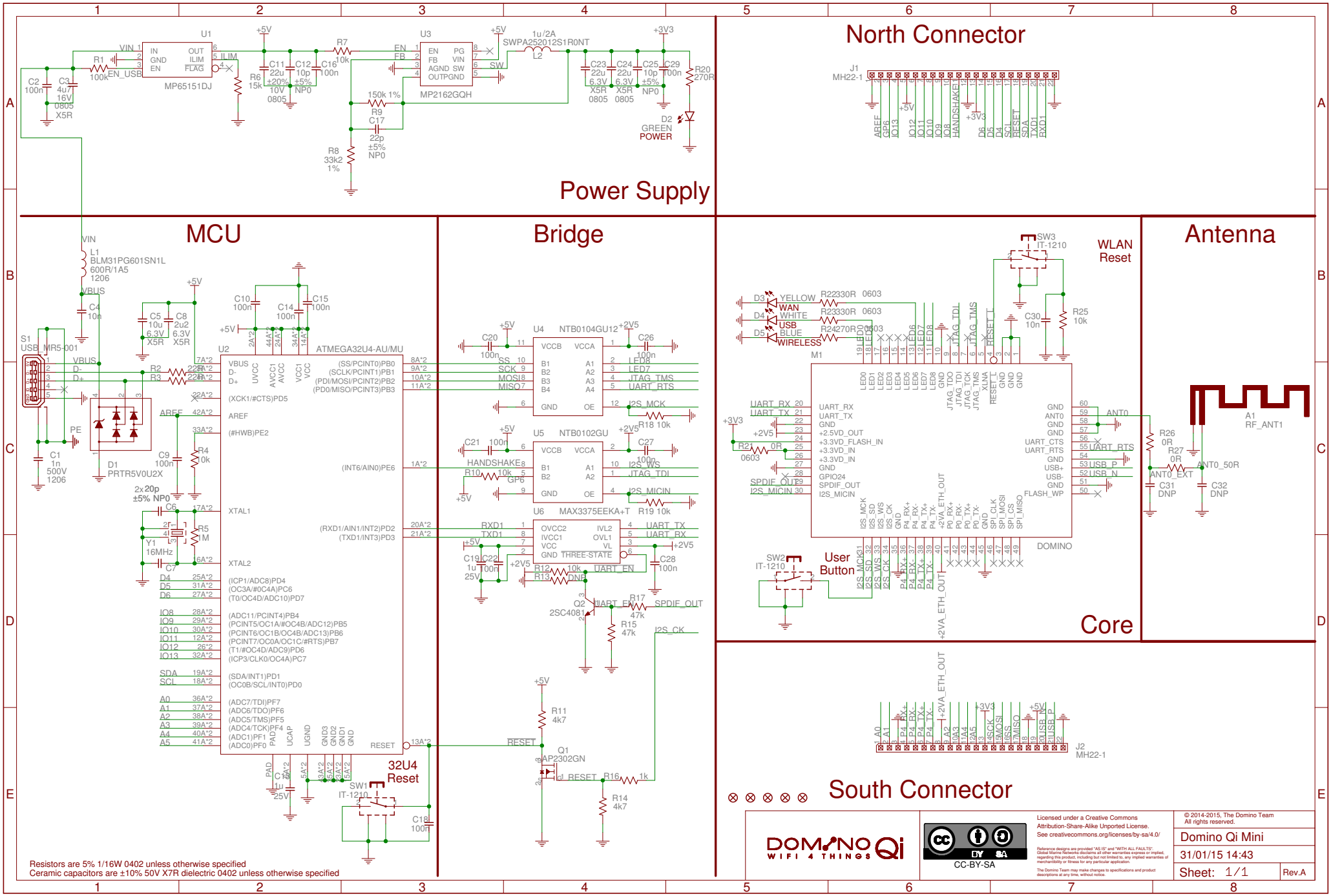
Power Supply
North Connector
MCU
Bridge
Antenna
Core
South Connector
WLAN Reset
User Button
32U4 Reset
ATMEGA32U4-AU/MU
MP65151DJ
MP2162GQH
NTB0104GU12
NTB0102GU
MAX3375EEKA+T
AP2302GN
2SC4081
PRTR5V0U2X
DOMINO
Resistors are 5% 1/16W 0402 unless otherwise specified
Ceramic capacitors are ±10% 50V X7R dielectric 0402 unless otherwise specified
DOMINO QI
WIFI 4 THINGS
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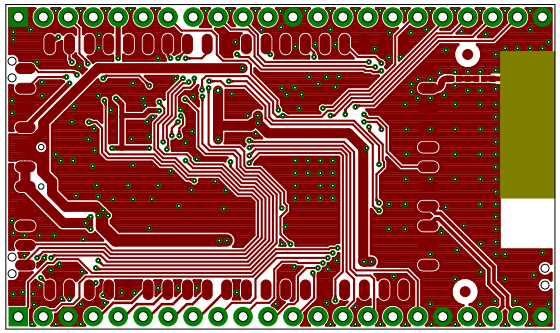
All rights reserved.
Domino Qi Mini
31/01/15 14:43
Sheet: 1/1
Rev.A

LAYER-STACK



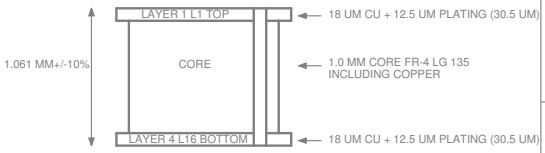
DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	327	YES
×	2	15	0.38	1	YES
◰	3	22	0.55	2	NOT
◇	4	31	0.80	6	NOT
⧖	5	40	1.02	44	YES

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

Class	RF	Type	Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	50 Ohms	26 mils	N/A	6 mils
Class	USB	Type	Diff Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	90 Ohms	14.5 mils	6 mils	6 mils
Class	Ethernet	Type	Diff Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	100 Ohms	10 mils	6 mils	6 mils

STACK-UP FOR REFERENCE



NOTES:

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4. HOLE SIZES SHOWN ARE FINISHED DIAMETERS AFTER PLATING.
5. BOARD PLATED USING REFLOW OR SIMILAR METHOD.
6. BOARD TO HAVE WHITE SOLDER MASK ON PLATED SURFACES USING WET FILM SR100 OR SR1010 EPOXY.
EQUIVALENT WET OR DRY FILM MAY BE USED.
7. SILKSCREEN BOARD USING BLACK INK. DISTORTION OF SILKSCREEN IS ACCEPTABLE OVER TRACES. EPOXY INK ON PLATED LANDS IS NOT ACCEPTABLE.
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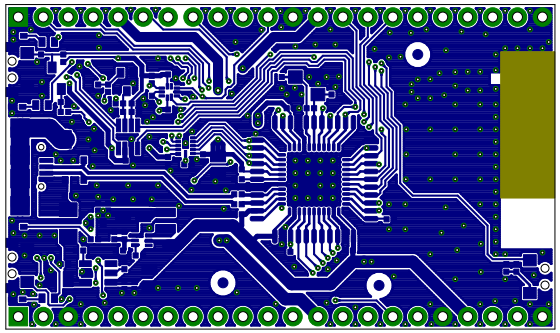
DOMINO Qi
WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Component Side (.CMP) | Rev. A

LAYER-STACK



DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	327	YES
×	2	15	0.38	1	YES
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◈	4	31	0.80	6	NOT
⧖	5	40	1.02	44	YES

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

Class	RF	Type	Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
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Class	USB	Type	Diff Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
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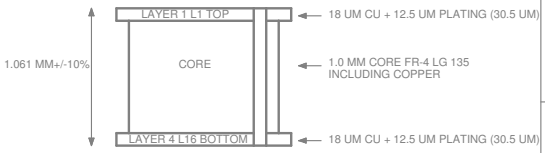
Class	Ethernet	Type	Diff Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	100 Ohms	10 mils	6 mils	6 mils

STACK-UP FOR REFERENCE



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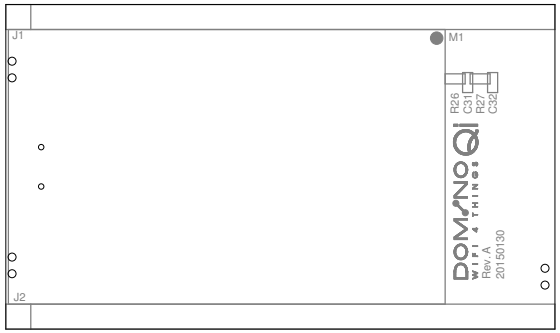
DOMINO Qi
WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Solder side (.SOL) | Rev. A

LAYER-STACK



DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
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×	2	15	0.38	1	YES
◰	3	22	0.55	2	NOT
◈	4	31	0.80	6	NOT
⧖	5	40	1.02	44	YES

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

Class	RF	Type	Coated Coplanar Waveguide With Ground 1B		
Layer	Impedance	Trace Width		Trace Separation	Ground Separation
TOP, BOTTOM	50 Ohms	26 mils		N/A	6 mils
Class	USB	Type	Diff Coated Coplanar Waveguide With Ground 1B		
Layer	Impedance	Trace Width		Trace Separation	Ground Separation
TOP, BOTTOM	90 Ohms	14.5 mils		6 mils	6 mils
Class	Ethernet	Type	Diff Coated Coplanar Waveguide With Ground 1B		
Layer	Impedance	Trace Width		Trace Separation	Ground Separation
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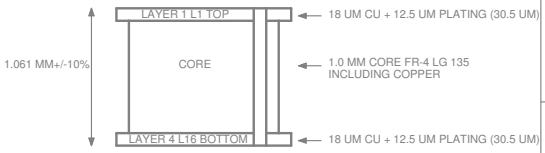
STACK-UP FOR REFERENCE



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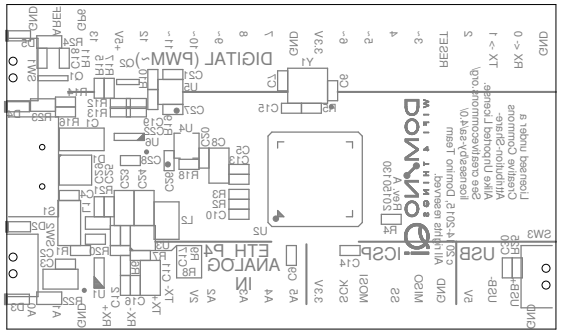
DOMINO Qi WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Silk screen CMP (.PLC) | Rev. A

LAYER-STACK



DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	327	YES
×	2	15	0.38	1	YES
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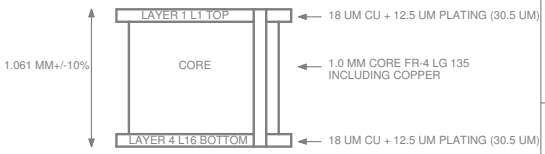
◈	4	31	0.80	6	NOT
⧖	5	40	1.02	44	YES

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

Class	RF	Type	Coated Coplanar Waveguide With Ground 1B		
Layer	Impedance	Trace Width		Trace Separation	Ground Separation
TOP, BOTTOM	50 Ohms	26 mils		N/A	6 mils
Class	USB	Type	Diff Coated Coplanar Waveguide With Ground 1B		
Layer	Impedance	Trace Width		Trace Separation	Ground Separation
TOP, BOTTOM	90 Ohms	14.5 mils		6 mils	6 mils
Class	Ethernet	Type	Diff Coated Coplanar Waveguide With Ground 1B		
Layer	Impedance	Trace Width		Trace Separation	Ground Separation
TOP, BOTTOM	100 Ohms	10 mils		6 mils	6 mils

STACK-UP FOR REFERENCE



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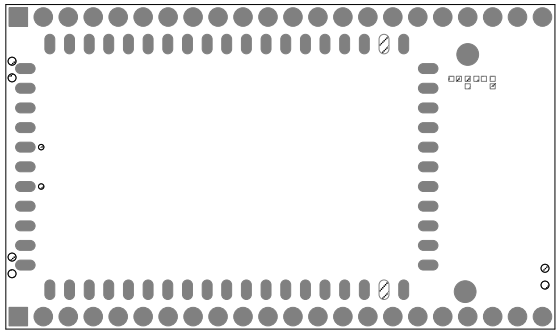
DOMINO Qi WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Silk screen SOL (.PLS) | Rev. A

LAYER-STACK



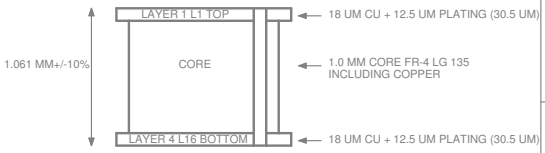
DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	327	YES
×	2	15	0.38	1	YES
◰	3	22	0.55	2	NOT
◇	4	31	0.80	6	NOT
⧖	5	40	1.02	44	YES

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

Class	RF	Type	Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	50 Ohms	26 mils	N/A	6 mils
Class	USB	Type	Diff Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	90 Ohms	14.5 mils	6 mils	6 mils
Class	Ethernet	Type	Diff Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	100 Ohms	10 mils	6 mils	6 mils

STACK-UP FOR REFERENCE



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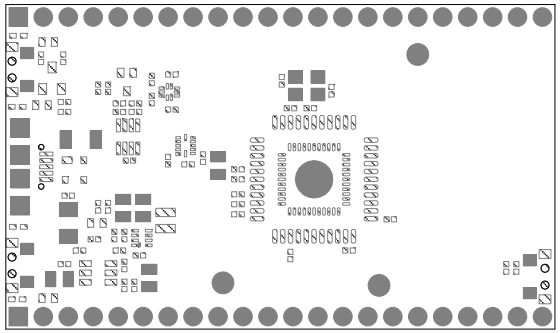
DOMINO Qi
WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Solder stop mask CMP (.STC) | Rev. A

LAYER-STACK



DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	327	YES
×	2	15	0.38	1	YES
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LINE WIDTH IMPEDANCE CHART FOR REFERENCE

Class	RF	Type	Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	50 Ohms	26 mils	N/A	6 mils
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Layer	Impedance	Trace Width	Trace Separation	Ground Separation
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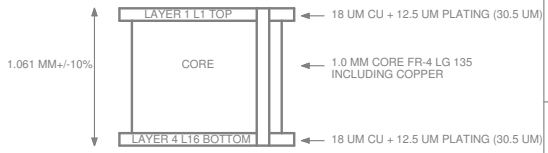
STACK-UP FOR REFERENCE



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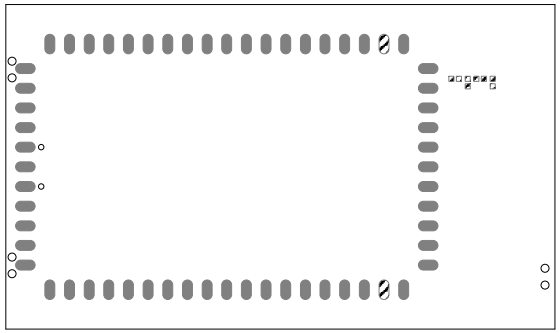
DOMINO Qi
WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Solder stop mask SOL (.STS) | Rev. A

LAYER-STACK



DRILL CHART: TOP TO BOTTOM

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LINE WIDTH IMPEDANCE CHART FOR REFERENCE

Class	RF	Type	Coated Coplanar Waveguide With Ground 1B	
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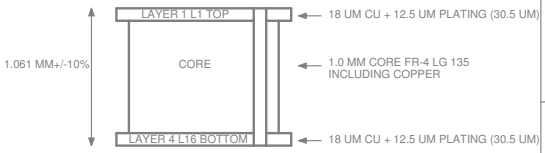

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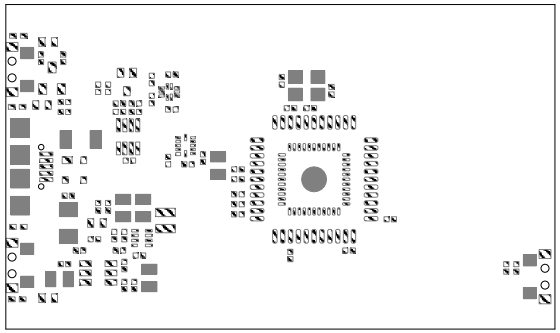
DOMINO Qi
WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Cream frame CMP (.CRC) | Rev. A

LAYER-STACK



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LINE WIDTH IMPEDANCE CHART FOR REFERENCE

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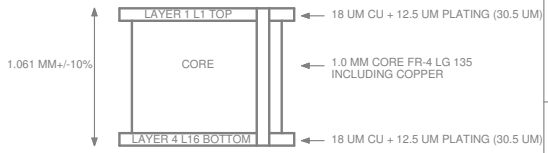

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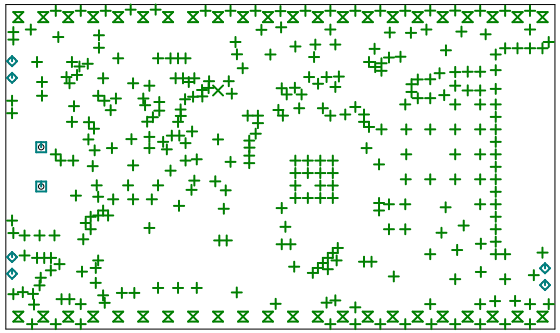
DOMINO Qi
WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Cream frame SOL (.CRS) | Rev. A



LAYER-STACK
01-16
01-20

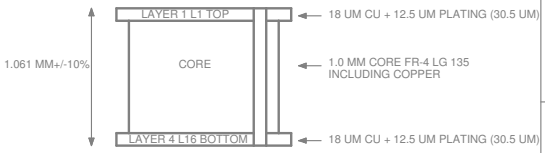
DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	327	YES
×	2	15	0.38	1	YES
◰	3	22	0.55	2	NOT
◇	4	31	0.80	6	NOT
⧖	5	40	1.02	44	YES

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

Class	RF	Type	Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	50 Ohms	26 mils	N/A	6 mils
Class	USB	Type	Diff Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	90 Ohms	14.5 mils	6 mils	6 mils
Class	Ethernet	Type	Diff Coated Coplanar Waveguide With Ground 1B	
Layer	Impedance	Trace Width	Trace Separation	Ground Separation
TOP, BOTTOM	100 Ohms	10 mils	6 mils	6 mils

STACK-UP FOR REFERENCE



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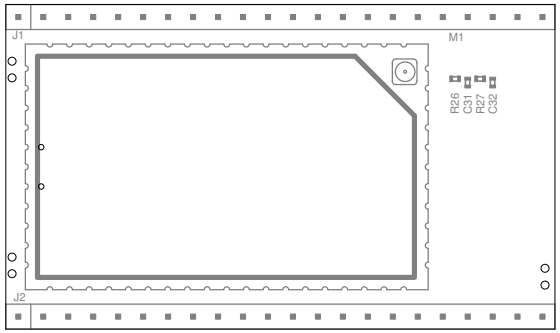
DOMINO Qi
WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Drill data (.DRD) | Rev. A

LAYER-STACK



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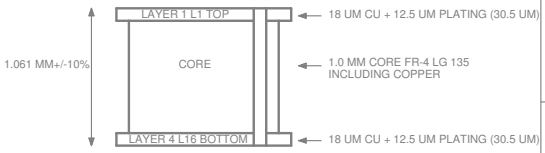

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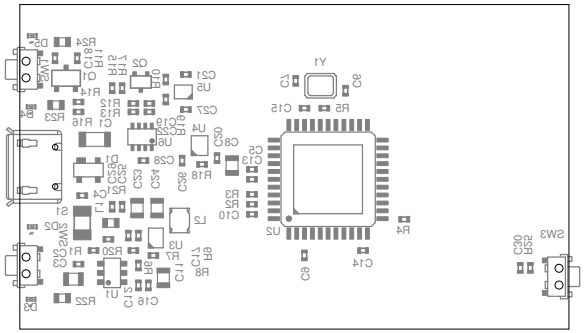
DOMINO Qi
WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Component Assembly CMP (.ASC) | Rev. A

LAYER-STACK



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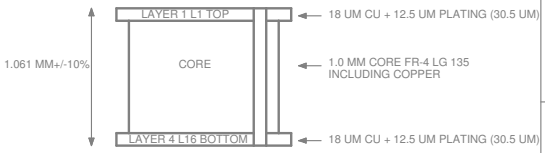

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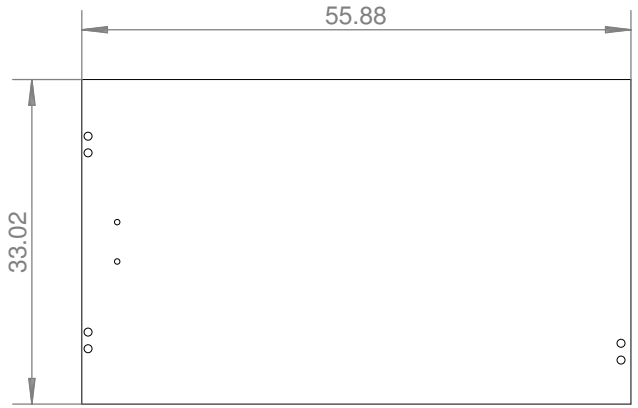
DOMINO Qi
WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Component Assembly SOL (.ASS) | Rev. A

LAYER-STACK



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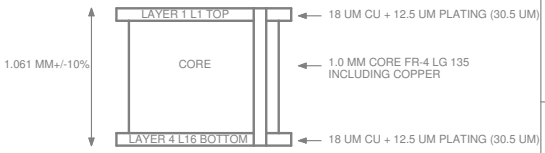

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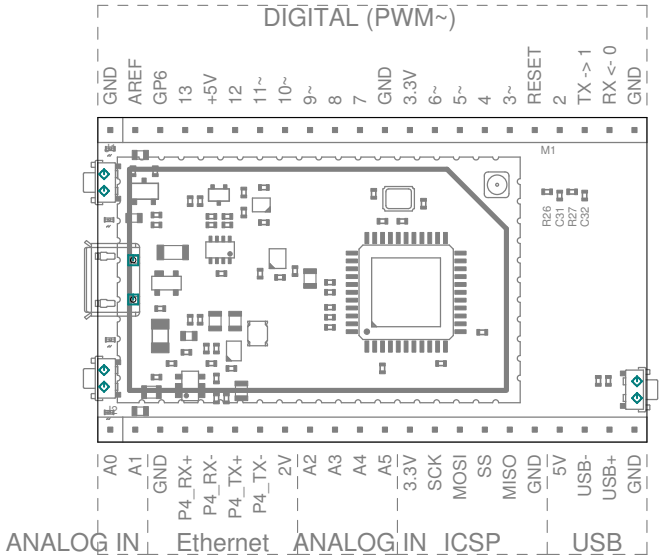
DOMINO Qi
WIFI 4 THINGS

Domino Qi Mini

31/01/15 14:56

Outline (.OLN) | Rev. A



DRILL CHART: TOP TO BOTTOM

LAYER-STACK

01-20

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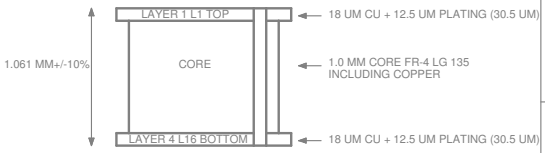

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DOMINO Qi
WIFI 4 THINGS

CC-BY-SA

Domino Qi Mini

31/01/15 14:56

Pinout (.PIN) | Rev. A

Domino Qi Mini Rev. A

Item	Qty	Value	Manufacturer	Device	Package	Reference	Description	Remarks
1	1	1n	ANY	C1206_1n_X7R_10%_CER_500V	C1206	C1	CAP CER 1000PF 500V 10% X7R 1206	
2	1	22u	ANY	C1206_22u_X7R_20%_CER_10V	C0805	C11	CAP CER 22UF 10V 20% X7R 1206	
3	2	10p	ANY	C0402_10p_NP0_5%_CER_50V	C0402	C12, C25	CAP CER 10PF 50V 5% NP0 0402	
4	2	1u	ANY	C0402_1u_X7R_10%_CER_25V	C0402	C13, C19	CAP CER 1UF 25V 10% X7R 0402	
5	1	22p	ANY	C0402_22p_NP0_5%_CER_50V	C0402	C17	CAP CER 22PF 50V 5% NP0 0402	
6	14	100n	ANY	C0402_100n_X7R_10%_CER_50V	C0402	C2, C9, C10, C14, C15, C16, C18, C20, C21, C22	CAP CER 0.1UF 50V 10% X7R 0402	
7	2	22u	ANY	C0805_22u_X5R_20%_CER_6V3	C0805	C23, C24	CAP CER 22UF 6.3V 20% X5R 0805	
8	1	4u7	ANY	C0805_4u7_X5R_10%_CER_16V	C0805	C3	CAP CER 4.7UF 16V 10% X5R 0805	
9	0	DNP	NONE	C0402_DNP	C0402	C31(DNP), C32(DNP)	CAP DNP 0402	
10	2	10n	ANY	C0402_10n_X7R_10%_CER_50V	C0402	C4, C30	CAP CER 10000PF 50V 10% X7R 0402	
11	1	10u	ANY	C0402_10u_X5R_10%_CER_6V3	C0402	C5	CAP CER 10UF 6.3V 10% X5R 0402	
12	2	20p	ANY	C0402_20p_NP0_5%_CER_50V	C0402	C6, C7	CAP CER 20PF 50V 5% NP0 0402	
13	1	2u2	ANY	C0402_2u2_X5R_10%_CER_6V3	C0805	C8	CAP CER 2.2UF 6.3V 20% X5R 0402	
14	1	PRTR5V0U2X	NXP	PRTR5V0U2X	SOT143B	D1	TVS DIODE ARRAY 2CH 5V SOT143	
15	1	GREEN	ANY	LED0603-GREEN	LED0402	D2	LED GREEN CLEAR 0603 SMD	
16	1	YELLOW	ANY	LED0603-YELLOW	LED0402	D3	LED YELLOW CLEAR 0603 SMD	
17	1	WHITE	ANY	LED0603-WHITE	LED0402	D4	LED WHITE CLEAR 0603 SMD	
18	1	BLUE	ANY	LED0603-BLUE	LED0402	D5	LED BLUE CLEAR 0603 SMD	
19	2	MH22-1	ANY	MH22-1-0.1	MH22-1-0.1	J1, J2	CONN HEADER VERT .100 1ROW 22POS 10.5 TAIL 8.5 BODY 15AU	
20	1	BLM31PG601SN1L	MURATA	BLM31PG601SN1L	FB1206	L1	FERRITE CHIP 600 OHM 1500MA 1206	
21	1	SWPA252012S1R0NT	SUNLORD	SWPA252012SMT	SWPA252012S	L2	INDUCTOR 1.2UH 2.0A SMD2.5 X 2.0 X 1.2	
22	1	DOMINO	GL-CONNECT	DOMINO-CORE	DOMINO	M1	MOD AR9331 WIFI	
23	1	AP2302GN	ANPEC	AP2302GN	SOT23-3	Q1	MOSFET N-CH 20V 2.8A SOT-23	
24	1	2SC4081	ROHM SEMICONDUCTOR	2SC4081	SOT323	Q2	TRANS NPN 50V 0.15A SOT-323	
25	1	100k	ANY	R0402_100k_5%_62.5mW	R0402	R1	RES 100K OHM 1/16W 5% 0402 SMD	
26	2	4k7	ANY	R0402_4k7_5%_62.5mW	R0402	R11, R14	RES 4.7K OHM 1/16W 5% 0402 SMD	
27	2	47k	ANY	R0402_47k_5%_62.5mW	R0402	R15, R17	RES 47K OHM 1/16W 5% 0402 SMD	
28	1	1k	ANY	R0402_1k_5%_62.5mW	R0402	R16	RES 1K OHM 1/16W 5% 0402 SMD	
29	2	22R	ANY	R0402_22R_5%_62.5mW	R0402	R2, R3	RES 22 OHM 1/16W 5% 0402 SMD	
30	1	270R	ANY	R0402_270R_5%_62.5mW	R0402	R20	RES 270 OHM 1/16W 5% 0402 SMD	
31	1	0R	ANY	R0603_0R_5%_125mW	R0603	R21	RES 0.0 OHM 1/8W JUMP SMD 0603	
32	2	330R	ANY	R0603_330R_5%_125mW	R0603	R22, R23	RES 330 OHM 1/8W 5% 0603 SMD	
33	1	270R	ANY	R0603_270R_5%_125mW	R0603	R24	RES 270 OHM 1/8W 5% 0603 SMD	
34	2	0R	ANY	R0402_0R_5%_62.5mW	R0402	R26, R27	RES 0.0 OHM 1/16W JUMP 0402 SMD	
35	7	10k	ANY	R0402_10k_5%_62.5mW	R0402	R4, R7, R10, R12, R13(DNP), R18, R19, R25	RES 10K OHM 1/16W 5% 0402 SMD	
36	1	1M	ANY	R0402_1M_5%_62.5mW	R0402	R5	RES 1M OHM 1/16W 0402 SMD	
37	1	15k	ANY	R0402_15k_5%_62.5mW	R0402	R6	RES 15K OHM 1/16W 5% 0402 SMD	
38	1	33k2	ANY	R0402_33k2_1%_62.5mW	R0402	R8	RES 33.2K OHM 1/16W 1% 0402 SMD	
39	1	150k	ANY	R0402_150k_1%_62.5mW	R0402	R9	RES 150K OHM 1/16W 1% 0402 SMD	
40	1	USB_MR5-001	SZJUSTWELL ELECTRONICS	USB MR5-003A	USB-MR5-001	S1	CONN USB MICRO B RECPT SMT R/A	
41	3	IT-1210	SZJUSTWELL ELECTRONICS	IT-1210	IT-1210	SW1, SW2, SW3	SWITCH TACTILE SPST-NO 0.05A 12V	
42	1	MP65151DJ	MONOLITHIC POWER	MP65151DJ	SOT23-6	U1	IC POWER SWITCH 1.7A SOT23-6	
43	1	ATMEGA32U4-AU/MU	ATMEL	ATMEGA32U4-MU	ATMEGA32U4_DUAL_	U2	IC MCU 8BIT 32KB FLASH 44QFN	Or ATMEGA32U4-AU
44	1	MP2162GQH	MONOLITHIC POWER	MP2162GQH	QFN-8_2X1.5	U3	IC REG BUCK SYNC ADJ 2A 8WDFN	
45	1	NTB0104GU12	NXP	NTB0104GU12	XQFN-12	U4	IC TRANSLATING TXRX 12XQFN	
46	1	NTB0102GU	NXP	NTB0102GU	XQFN-10	U5	IC TRANSLATING TXRX 10XQFN	
47	1	MAX3375EEKA+T	MAXIM INTEGRATED	MAX3375EEKA+T	SOT23-8	U6	IC LVL XLTR LV 8MBPS SOT23-8	
48	1	16MHz	ANY	CRYSTAL_16MHZ_32X25_2SH_12PF	CRYSTAL_32X25	Y1	CRYSTAL 16MHZ 12PF 30PPM 3.2 X 2.5 SMD	