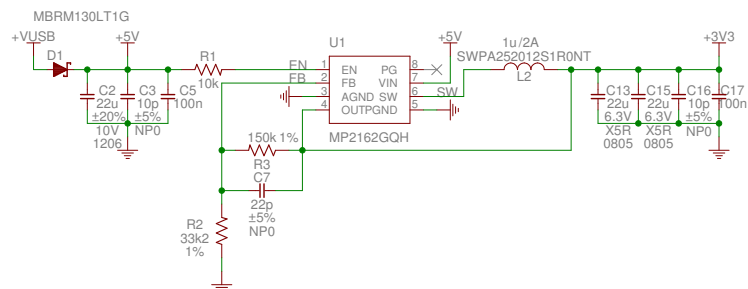
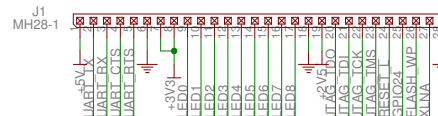


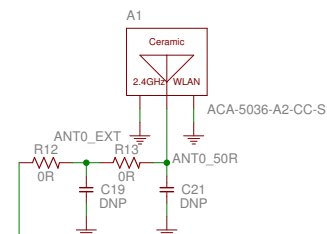
Power Supply



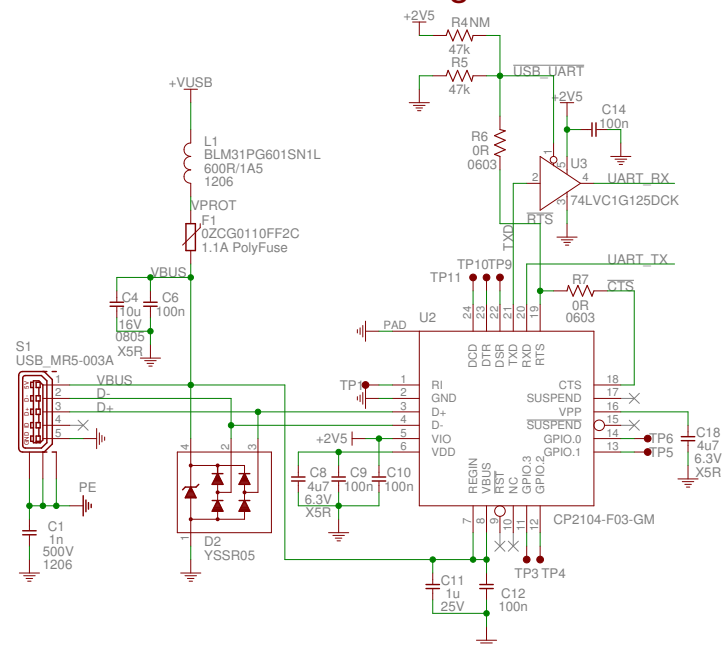
North Connector



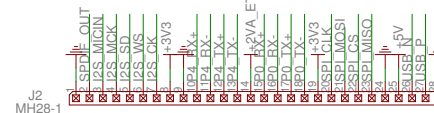
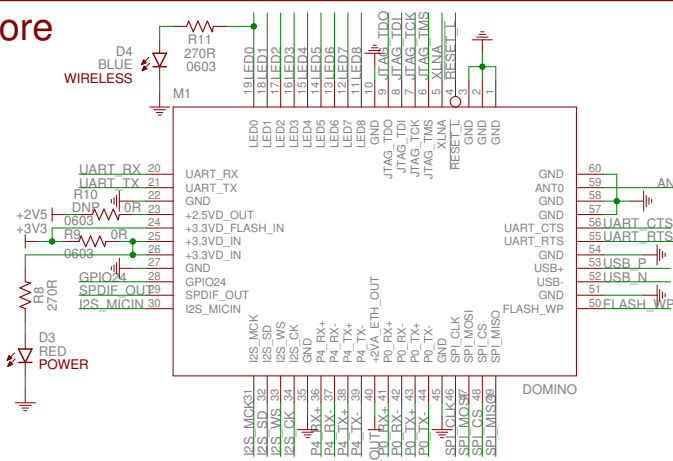
Antenna



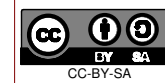
USB ↔ UART Bridge



Core



South Connector



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Domino Pi

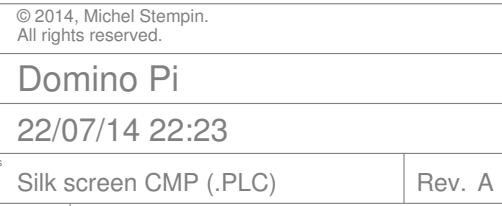
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Sheet: 1 / 1

Rev. A

Resistors are 5% 1/16W 0402 unless otherwise specified
Ceramic capacitors are $\pm 10\%$ 50V X7R dielectric 0402 unless otherwise specified

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1234

A

LAYER-STACK

DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	282	YES
×	2	14	0.35	2	YES
□	3	22	0.55	2	NOT
◇	4	40	1.02	56	YES
⊗	5	126	3.20	2	NOT

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

LAYER 1 L1 TOP

← 18 UM CU + 12.5 UM PLATING (30.5 UM)

← 1.0 MM CORE FR-4 LG 135 INCLUDING COPPER

← 18 UM CU + 12.5 UM PLATING (30.5 UM)

LAYER 4 L16 BOTTOM

1.061 MM +/-10%

NOTES:

1. PRINTED CIRCUIT BOARD MADE FROM NEMA GRADE FR-4 TG 135 EPOXY LAMINATE WITH 18 UM COPPER PLATING AND 1 MM THICKNESS.

2. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS EXCEPT TRACE WIDTH/SPACE

3. CIRCUIT PATHS ARE FOR REFERENCE ONLY.

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

8. THE FOLLOWING INFORMATION APPLIES TO THIS BOARD:

* 2 COPPER LAYERS

* 1 MM BOARD THICKNESS

* REQUIRES TOP AND BOTTOM SIDE SILKSCREENS

Domino Core

Domino Pi

Domino Qi

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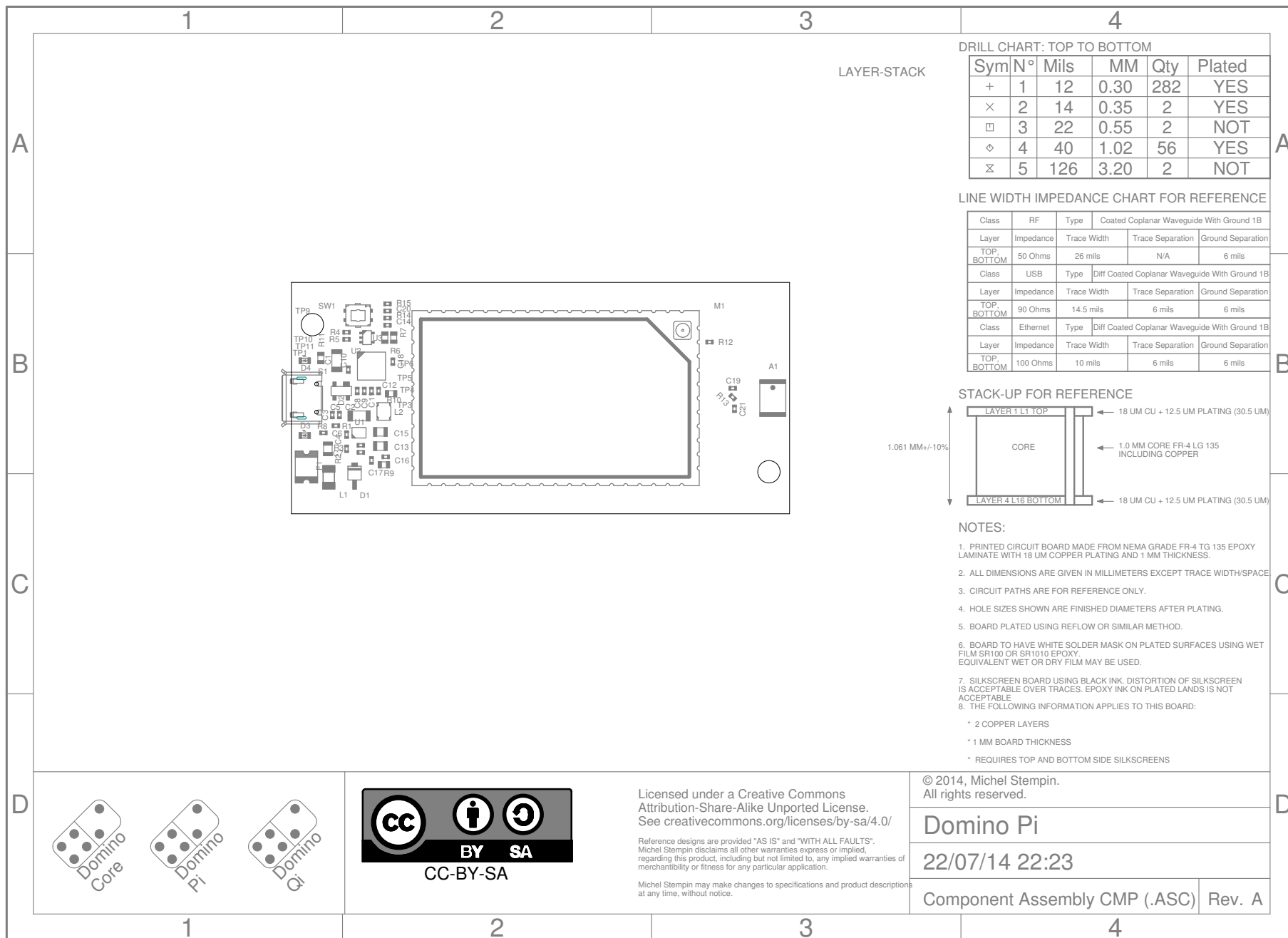
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Silk screen SOL (.PLS)

Rev. A

1234

D



1234

A

01-20

UARTLEDJTAG

I2SETH4ETH0SPISPIUSB

DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	282	YES
×	2	14	0.35	2	YES
□	3	22	0.55	2	NOT
◇	4	40	1.02	56	YES
⊗	5	126	3.20	2	NOT

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

1.061 MM +/- 10%

LAYER 1 L1 TOP

CORE

LAYER 4 L16 BOTTOM

← 18 UM CU + 12.5 UM PLATING (30.5 UM)

← 1.0 MM CORE FR-4 LG 135 INCLUDING COPPER

← 18 UM CU + 12.5 UM PLATING (30.5 UM)

NOTES:

1. PRINTED CIRCUIT BOARD MADE FROM NEMA GRADE FR-4 TG 135 EPOXY LAMINATE WITH 18 UM COPPER PLATING AND 1 MM THICKNESS.

2. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS EXCEPT TRACE WIDTH/SPACE

3. CIRCUIT PATHS ARE FOR REFERENCE ONLY.

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

8. THE FOLLOWING INFORMATION APPLIES TO THIS BOARD:

* 2 COPPER LAYERS

* 1 MM BOARD THICKNESS

* REQUIRES TOP AND BOTTOM SIDE SILKSCREENS

Domino Core

Domino Pi

Domino Qi

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Domino Pi

22/07/14 22:23

Pinout (.PIN)

Rev. A

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D

Domino Pi Rev. A

Item	Qty	Value	Manufacturer	Device	Package	Reference	Description	Remarks
1	1	ACA-5036-A2-CC-S	INPAQ TECHNOLOGY	ACA-5036-A2-CC-S	ACA-5036-A2-CC-S	A1	2.4GHZ CERAMIC CHIP ANTENNA	
2	1	1n	ANY	C1206_1n_X7R_10%_CER_500V	C1206	C1	CAP CER 1000PF 500V 10% X7R 1206	
3	1	1u	ANY	C0402_1u_X7R_10%_CER_25V	C0402	C11	CAP CER 1UF 25V 10% X7R 0402	
4	2	22u	ANY	C0805_22u_X5R_20%_CER_6V3	C0805	C13, C15	CAP CER 22UF 6.3V 20% X5R 0805	
5	0	DNP	NONE	C0402_DNP	C0402	C19(DNP), C21(DNP)	CAP DNP 0402	
6	1	122u	ANY	C1206_22u_X7R_20%_CER_10V	C1206	C2	CAP CER 22UF 10V 20% X7R 1206	
7	1	10n	ANY	C0402_10n_X7R_10%_CER_50V	C0402	C20	CAP CER 10000PF 50V 10% X7R 0402	
8	2	10p	ANY	C0402_10p_NP0_5%_CER_50V	C0402	C3, C16	CAP CER 10PF 50V 5% NP0 0402	
9	1	10u	ANY	C0805_10u_X5R_10%_CER_16V	C0805	C4	CAP CER 10UF 16V 10% X5R 0805	
10	7	100n	ANY	C0402_100n_X7R_10%_CER_50V	C0402	C5, C6, C9, C10, C12, C14, C17	CAP CER 0.1UF 50V 10% X7R 0402	
11	1	122p	ANY	C0402_22p_NP0_5%_CER_50V	C0402	C7	CAP CER 22PF 50V 5% NP0 0402	
12	2	4u7	ANY	C0402_4u7_X5R_10%_CER_6V3	C0402	C8, C18	CAP CER 4.7UF 6.3V 10% X5R 0402	
13	1	MBRM130LT1G	ON SEMICONDUCTOR	MBRM130LT1G	DO-216AA	D1	DIODE SCHOTTKY 30V 1A POWERMITE	
14	1	YSSR05	YEASHIN	YSSR05	SOT143B	D2	TVS DIODE ARRAY 2CH 5V SOT143	
15	1	RED	ANY	LED0603-RED	LED0603	D3	LED RED CLEAR 0603 SMD	
16	1	BLUE	ANY	LED0603-BLUE	LED0603	D4	LED BLUE CLEAR 0603 SMD	
17	1	10ZCG0110FF2C	BEL FUSE INC	0ZCG0110FF2C	PTC1812	F1	PTC RESETTBLE 1.10A 8V CHIP 1812	
18	2	MH28-1	ANY	MH28-1-0.1	MH28-1-0.1	J1, J2	CONN HEADER VERT .100 1ROW 28POS 10.5 TAIL 8.5 BODY 15AU	
19	1	BLM31PG601SN1L	MURATA	BLM31PG601SN1L	FB1206	L1	FERRITE CHIP 600 OHM 1500MA 1206	
20	1	SWPA252012S1R0NT	SUNLORD	SWPA252012SMT	SWPA252012S	L2	INDUCTOR 1.2UH 2.0A SMD2.5 X 2.0 X 1.2	
21	1	DOMINO	GL-CONNECT	DOMINO-CORE	DOMINO	M1	MOD AR9331 WIFI	
22	2	10k	ANY	R0402_10k_5%_62.5mW	R0402	R1, R15	RES 10K OHM 1/16W 5% 0402 SMD	
23	1	270R	ANY	R0603_270R_5%_125mW	R0603	R11	RES 270 OHM 1/8W 5% 0603 SMD	
24	2	20R	ANY	R0402_0R_5%_62.5mW	R0402	R12, R13	RES 0.0 OHM 1/16W JUMP 0402 SMD	
25	1	1k	ANY	R0402_1k_5%_62.5mW	R0402	R14	RES 1K OHM 1/16W 5% 0402 SMD	
26	1	33k2	ANY	R0402_33k2_1%_62.5mW	R0402	R2	RES 33.2K OHM 1/16W 1% 0402 SMD	
27	1	150k	ANY	R0402_150k_1%_62.5mW	R0402	R3	RES 150K OHM 1/16W 1% 0402 SMD	
28	1	47k	ANY	R0402_47k_5%_62.5mW	R0402	R4(DNP), R5	RES 47K OHM 1/16W 5% 0402 SMD	
29	3	30R	ANY	R0603_0R_5%_125mW	R0603	R6, R7, R9, R10(DNP)	RES 0.0 OHM 1/8W JUMP SMD 0603	
30	1	270R	ANY	R0402_270R_5%_62.5mW	R0402	R8	RES 270 OHM 1/16W 5% 0402 SMD	
31	1	USB_MR5-003A	SZJUSTWELL ELECTRONICS	USB MR5-003A	USB_MR5-003A	S1	CONN USB MICRO B RECPT SMT R/A	
32	1	IT-1124SMD	SZJUSTWELL ELECTRONICS	IT-1124SMD	IT-1124SMD	SW1	SWITCH TACTILE SPST-NO 0.02A 15V	
33	1	MP2162GQH	MONOLITHIC POWER	MP2162GQH	QFN-8_2X1.5	U1	IC REG BUCK SYNC ADJ 2A 8WDFN	
34	1	CP2104-F03-GM	SILICON LABORATORIES	CP2104-F03-GM	QFN-25_4X4	U2	IC SGL USB-TO-UART BRIDGE 24QFN	
35	1	74LVC1G125DCK	TEXAS INSTRUMENTS	74LVC1G125DCK	SC70	U3	IC BUFF/DVR TRI-ST N-INV SC705	