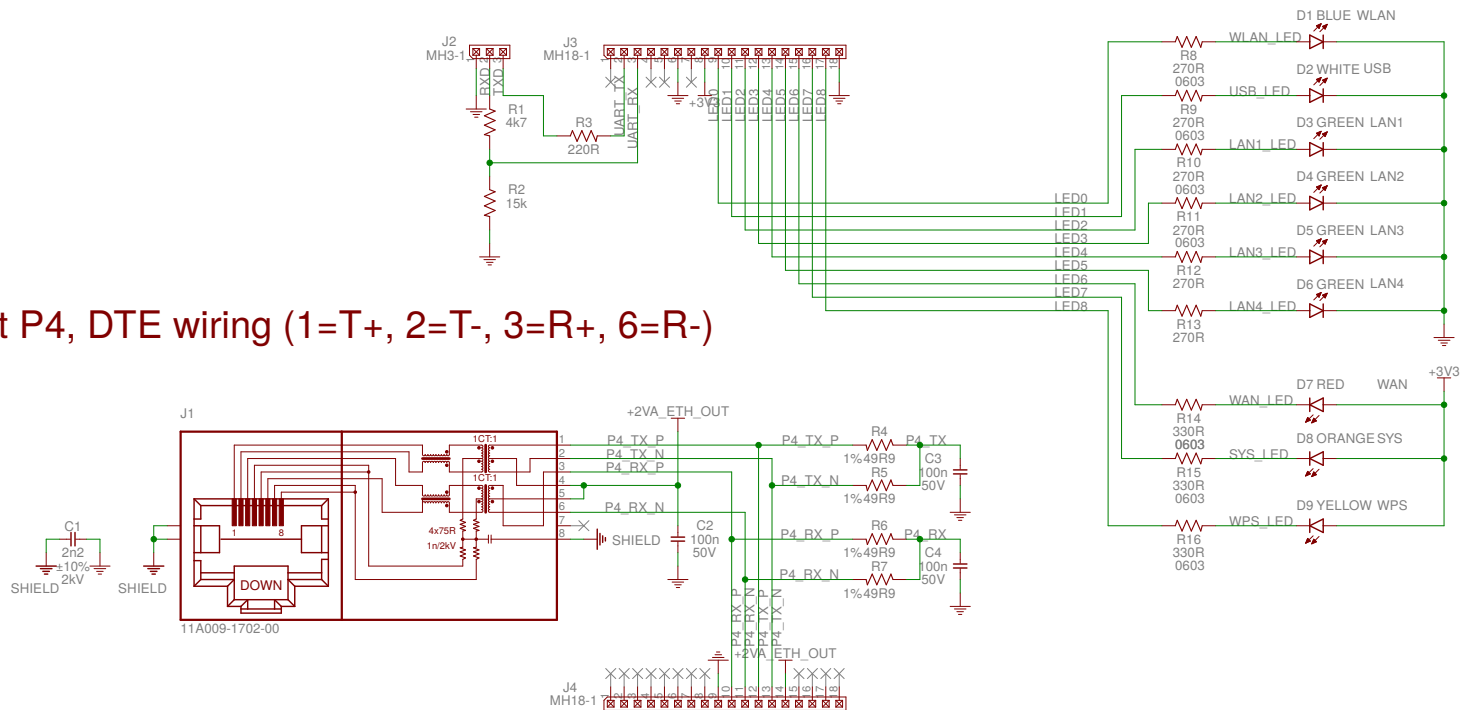
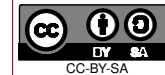


WAN on port P4, DTE wiring (1=T+, 2=T-, 3=R+, 6=R-)



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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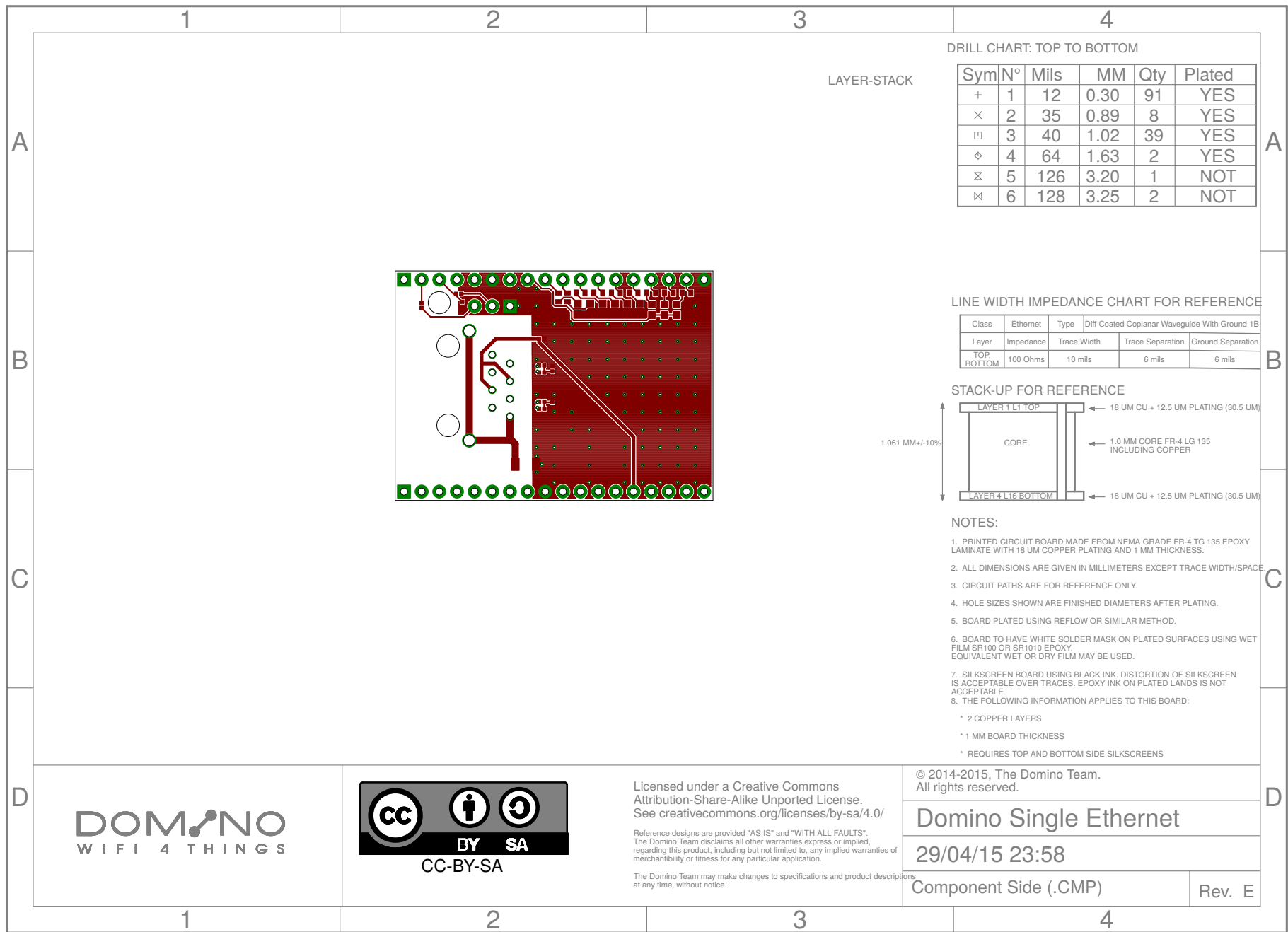
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**Domino Single Ethernet**

29/04/15 22:53

Sheet: 1/1

Rev. E







Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	91	YES
×	2	35	0.89	8	YES
□	3	40	1.02	39	YES
◇	4	64	1.63	2	YES
Σ	5	126	3.20	1	NOT
⊗	6	128	3.25	2	NOT

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	

1.061 MM +/- 10%

LAYER 1 TL TOP

18 UM CU + 12.5 UM PLATING (30.5 UM)

CORE

1.0 MM CORE FR-4 LG 135 INCLUDING COPPER

LAYER 4 TB BOTTOM

18 UM CU + 12.5 UM PLATING (30.5 UM)

1. PRINTED CIRCUIT BOARD MADE FROM NEMA GRADE FR-4 TO 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. SILKSREEN BOARD USING EPOXY INK. DISTORTION OF SILKSREEN IS ACCEPTABLE OVER TRACES. BLACK 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 SILKSREENS

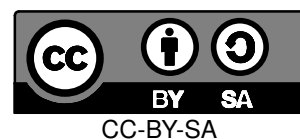
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Silk screen CMP (.PLC)

Rev. E



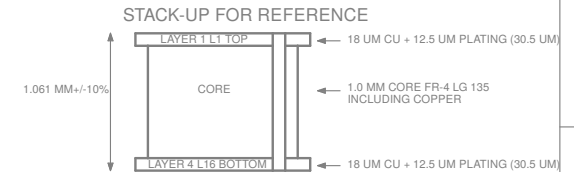
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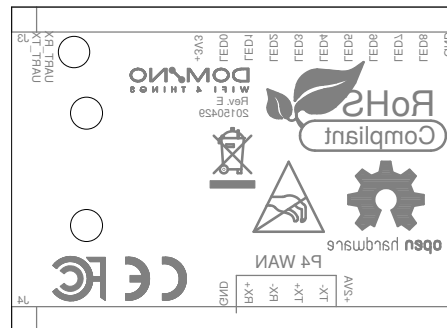
## DRILL CHART: TOP TO BOTTOM

LINE WIDTH IMPEDANCE CHART FOR REFERENCE



NOTES:

1. PRINTED CIRCUIT BOARD MADE FROM NEMA GRADE FR-4 TO 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 LAYS IS NOT ACCEPTABLE
8. THE FOLLOWING INFORMATION APPLIES TO THIS BOARD:
  - \* 2 COPPER LAYERS
  - \* 1 MM BOARD THICKNESS
  - \* REQUIRES TOP AND BOTTOM SIDE SILKSCREENS



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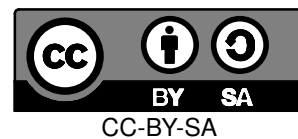
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Silk screen SOL (.PLS)

Rev. E

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1234

A

B

C

D

LAYER-STACK

DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	91	YES
×	2	35	0.89	8	YES
□	3	40	1.02	39	YES
◇	4	64	1.63	2	YES
⊗	5	126	3.20	1	NOT
⊗	6	128	3.25	2	NOT

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

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 LT TOP

CORE

LAYER 4 LT6 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

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Cream frame SOL (.CRS)

Rev. E

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1234

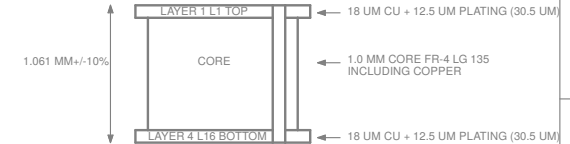
### DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	91	YES
×	2	35	0.89	8	YES
□	3	40	1.02	39	YES
◇	4	64	1.63	2	YES
×	5	126	3.20	1	NOT
⋈	6	128	3.25	2	NOT

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

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

## STACK-UP FOR REFERENCE



NOTES:

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

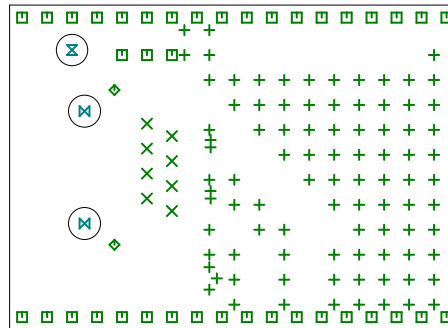
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Drill data (.DRD)

Rev. E





1234

A

B

C

D

1234

DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	91	YES
×	2	35	0.89	8	YES
□	3	40	1.02	39	YES
◇	4	64	1.63	2	YES
⊗	5	126	3.20	1	NOT
⊗	6	128	3.25	2	NOT

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

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 LT TOP

CORE

LAYER 4 LT6 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

LAYER-STACK

Rev E

SOL10204S

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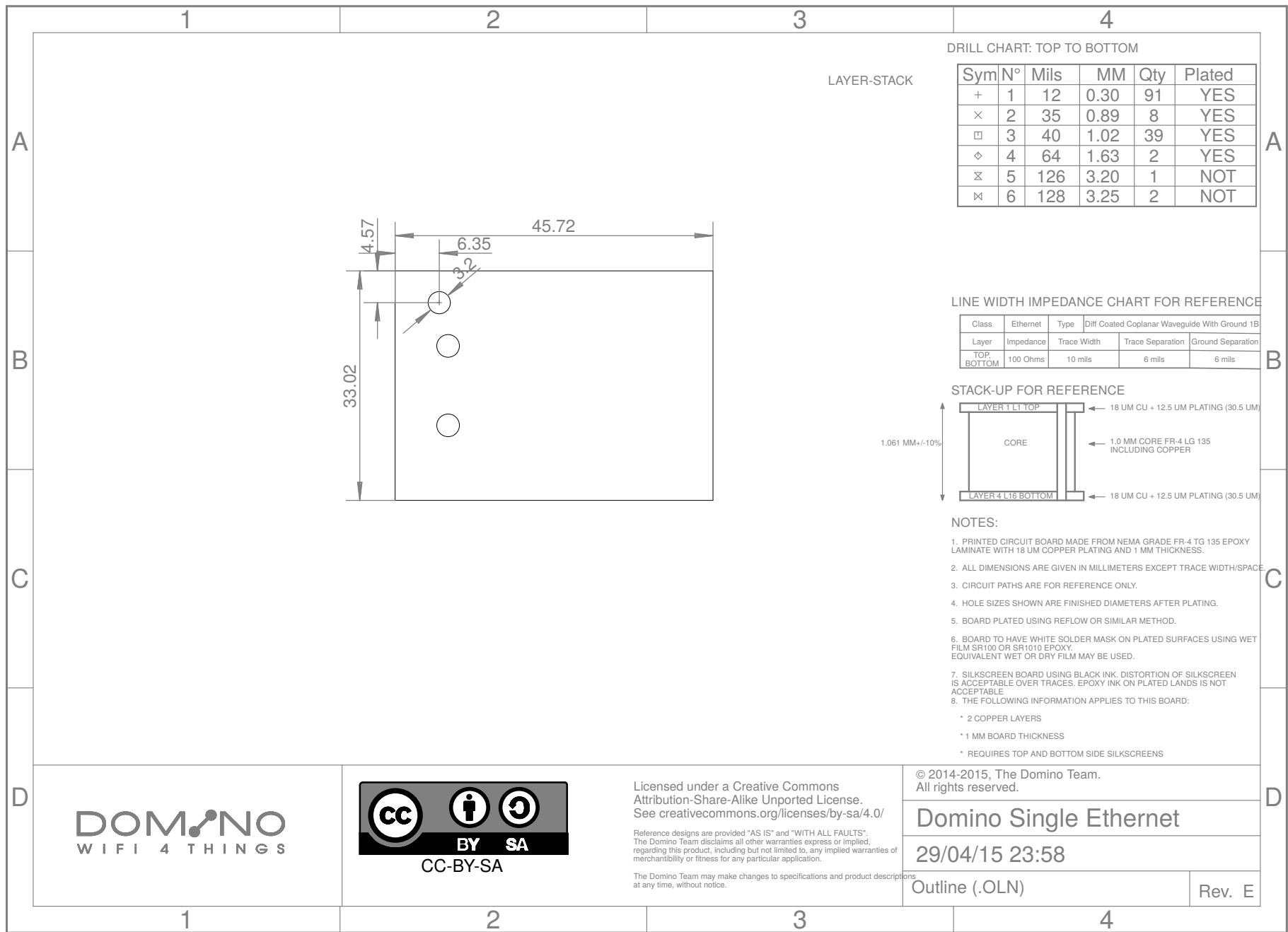
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Component Assembly SOL (.ASS)

Rev. E

1234



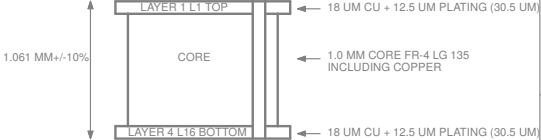
DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	91	YES
×	2	35	0.89	8	YES
□	3	40	1.02	39	YES
◇	4	64	1.63	2	YES
⊗	5	126	3.20	1	NOT
⊠	6	128	3.25	2	NOT

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

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

STACK-UP FOR REFERENCE



NOTES:

- PRINTED CIRCUIT BOARD MADE FROM NEMA GRADE FR-4 TG 135 EPOXY LAMINATE WITH 18 UM COPPER PLATING AND 1 MM THICKNESS.
- ALL DIMENSIONS ARE GIVEN IN MILLIMETERS EXCEPT TRACE WIDTH/SPACE.
- CIRCUIT PATHS ARE FOR REFERENCE ONLY.
- HOLE SIZES SHOWN ARE FINISHED DIAMETERS AFTER PLATING.
- BOARD PLATED USING REFLOW OR SIMILAR METHOD.
- BOARD TO HAVE WHITE SOLDER MASK ON PLATED SURFACES USING WET FILM SR100 OR SR1010 EPOXY. EQUIVALENT WET OR DRY FILM MAY BE USED.
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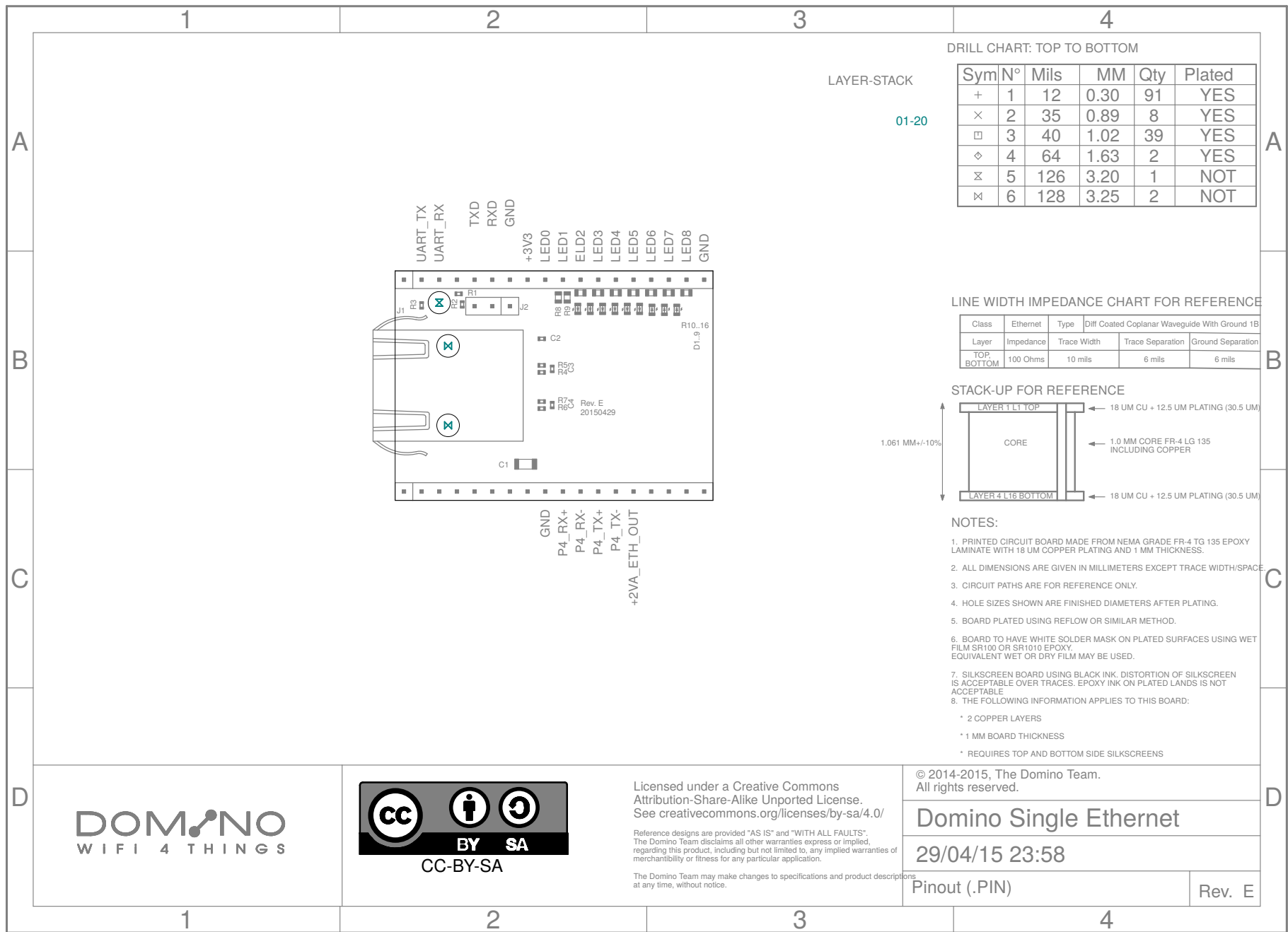
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Outline (.OLN)

Rev. E



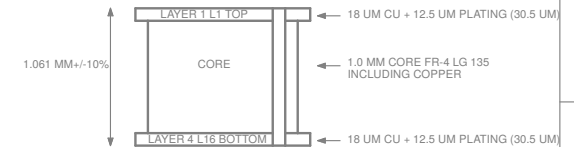
DRILL CHART: TOP TO BOTTOM

Sym	N°	Mils	MM	Qty	Plated
+	1	12	0.30	91	YES
×	2	35	0.89	8	YES
□	3	40	1.02	39	YES
◇	4	64	1.63	2	YES
⊗	5	126	3.20	1	NOT
⊗	6	128	3.25	2	NOT

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

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

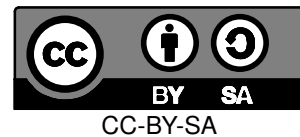
STACK-UP FOR REFERENCE



NOTES:

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Pinout (.PIN)

Rev. E

# Domino Single Ethernet Rev. E

Item	Qty	Value	Manufacturer	Device	Package	Reference	Description	Remarks
1	1	2n2	ANY	C1210_2n2_X7R_10%_CER_2kV	C1206	C1	CAP CER 2200PF 1KV 10% X7R 1210	
2	3	100n	ANY	C0402_100n_X7R_10%_CER_50V	C0402	C2, C3, C4	CAP CER 0.1UF 50V 10% X7R 0402	
3	1	BLUE	ANY	LED0603-BLUE	LED0603	D1	LED BLUE CLEAR 0603 SMD	
4	1	WHITE	ANY	LED0603-WHITE	LED0603	D2	LED WHITE CLEAR 0603 SMD	
5	4	GREEN	ANY	LED0603-GREEN	LED0603	D3, D4, D5, D6	LED GREEN CLEAR 0603 SMD	
6	1	RED	ANY	LED0603-ORANGE	LED0603	D7	LED ORANGE CLEAR 0603 SMD	
7	1	ORANGE	ANY	LED0603-ORANGE	LED0603	D8	LED ORANGE CLEAR 0603 SMD	
8	1	YELLOW	ANY	LED0603-YELLOW	LED0603	D9	LED YELLOW CLEAR 0603 SMD	
9	1	11A009-1702-00	MENTECH	11A009-1702-00	11A009-1702-00	J1	CONN MAGJACK 1PORT 100 BASE-T	
10	1	MH3-1	ANY	MH3-1-0.1	MH3-1-0.1	J2	CONN HEADER VERT .100 1ROW 3POS 8.08 HEAD 3.05 TAIL 15AU	
11	2	MH18-1	ANY	MH18-1-0.1	MH18-1-0.1	J3, J4	CONN HEADER VERT .100 1ROW 18POS 8.08 HEAD 3.05 TAIL 15AU	
12	1	4k7	ANY	R0402_4k7_5%_62.5mW	R0402	R1	RES 4.7K OHM 1/16W 5% 0402 SMD	
13	3	330R	ANY	R0603_330R_5%_125mW	R0603	R14, R15, R16	RES 330 OHM 1/8W 5% 0603 SMD	
14	1	15k	ANY	R0402_15k_5%_62.5mW	R0402	R2	RES 15K OHM 1/16W 5% 0402 SMD	
15	1	220R	ANY	R0402_220R_5%_62.5mW	R0402	R3	RES 220 OHM 1/16W 5% 0402 SMD	
16	4	49R9	ANY	R0402_49R9_1%_62.5mW	R0402	R4, R5, R6, R7	RES 49.9 OHM 1/16W 1% 0402 SMD	
17	6	270R	ANY	R0603_270R_5%_125mW	R0603	R8, R9, R10, R11, R12, R13	RES 270 OHM 1/8W 5% 0603 SMD	