



RAPTORX BROADBAND VHF/UHF NETWORKING SYSTEM
PCB AND INTERNAL IMAGES OF NETWORK SHELF AND REDUNDANT POWER SHELF
FCC ID: 2ABCU-50739
05/01/15

Network Shelf Images:

Figure 24: Top View, RaptorX 24 GHz to VHF/UHF Translator Board (EUT)

Figure 25: Bottom View, RaptorX 2.4 GHz to VHF/UHF Translator Board (EUT)

Figure 26: Top View, Network Shelf Processor

Figure 27: Bottom View, Network Shelf Processor

Figure 28: Top view, Linear Output Amplifier

Figure 29: Bottom View, Linear Output Amplifier

Figure 30: Top View, Protocol Translator Board

Figure 31: Bottom View, Protocol Translator Board

Figure 32: Top View, Clock Distribution Board

Figure 33: Bottom View, Clock Distribution Board

Figure 34: Top View, Network Shelf LED Status Board

Figure 35: Bottom View, Network Shelf LED Status Board

Figure 36: Top View, Network Shelf Power Distribution Board

Figure 37: Bottom View, Network Shelf Power Distribution Board

Redundant Power Shelf Images:

Figure 38: Top/Bottom View, Front Panel LCD Board

Figure 39: Top View, Power Supply Shelf – AC Input Board

Figure 40: Bottom View, Power Supply Shelf- AC Input Board

Figure 41: Top View, Power Management Board

Figure 42: Bottom View, Power Management Board

Figure 43: Top View, Power Apply Board (Used in Redundant Power Shelf)

Figure 44: Bottom View, Power Apply Board (Used in Redundant Power Shelf)

Figure 45: Top View, Power Shelf Front Panel LED Status Board

Figure 46: Bottom View, Power Shelf Front Panel LED Status Board

Other Images:

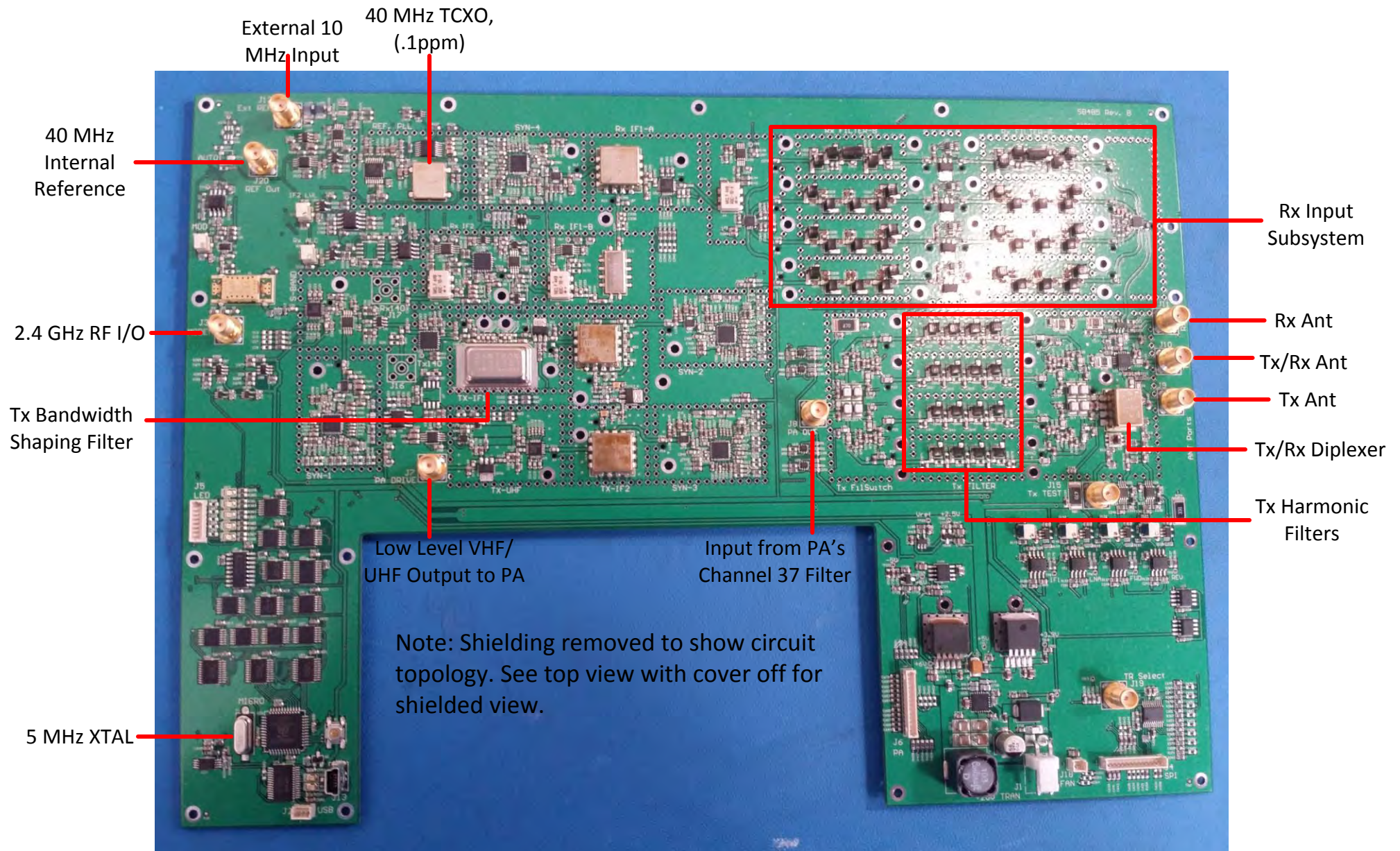
Figure 47: Top View Internal Single Channel Network Shelf

Figure 48: Top View Production Protocol Board

Figure 49: Top View Linear Amplifier (Production)

Figure 50: Top View Redundant Power Shelf

FIGURE 24: TOP VIEW, RAPTORX 2.4 GHZ TO VHF/UHF TRANSLATOR BOARD (EUT)



8.500"

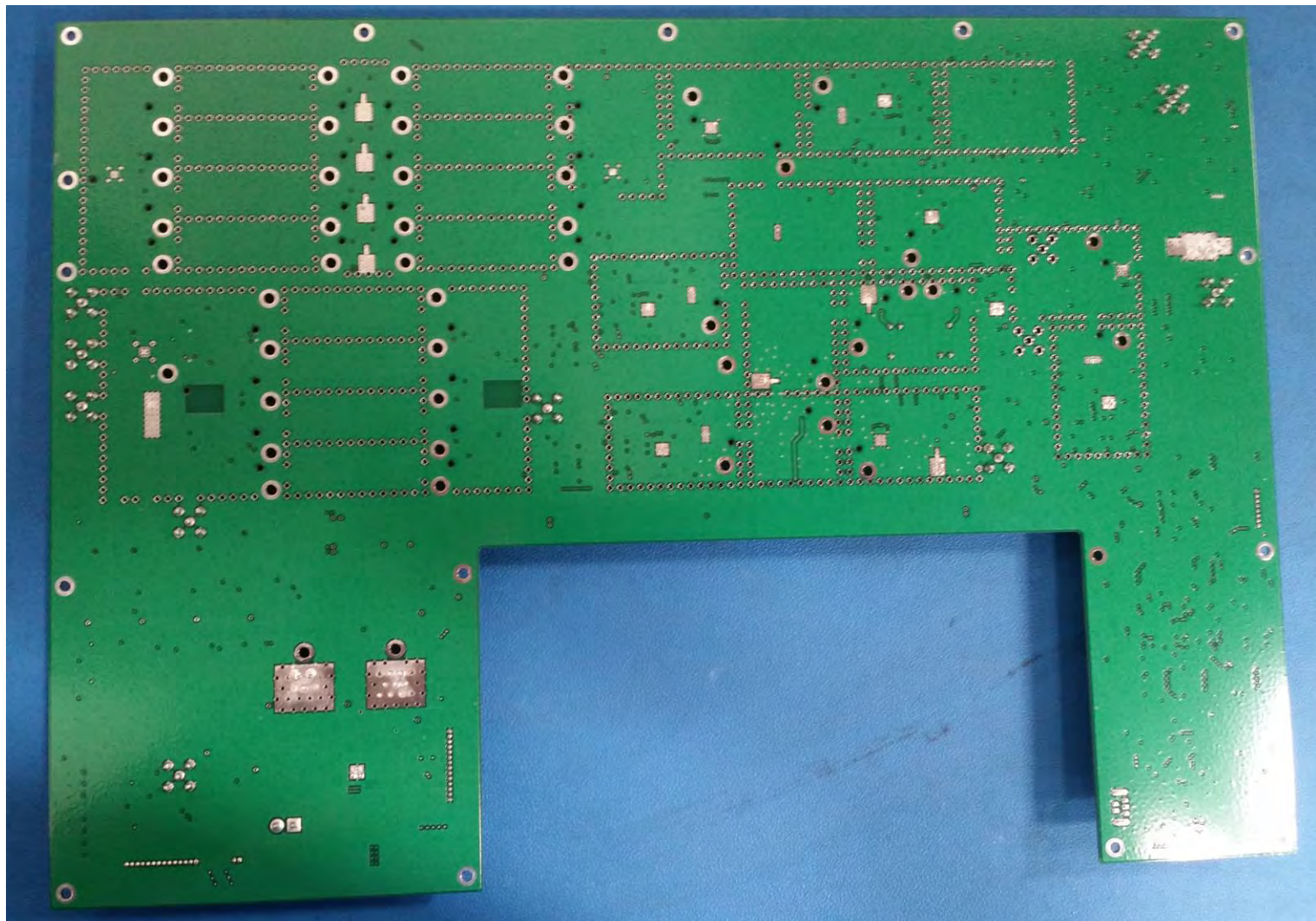
12.000"



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FIGURE 25: BOTTOM VIEW, RAPTORX 2.4 GHZ TO VHF/UHF TRANSLATOR BOARD (EUT)



8500
mils

1200 mils



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FIGURE 26: TOP VIEW, NETWORK SHELF PROCESSOR

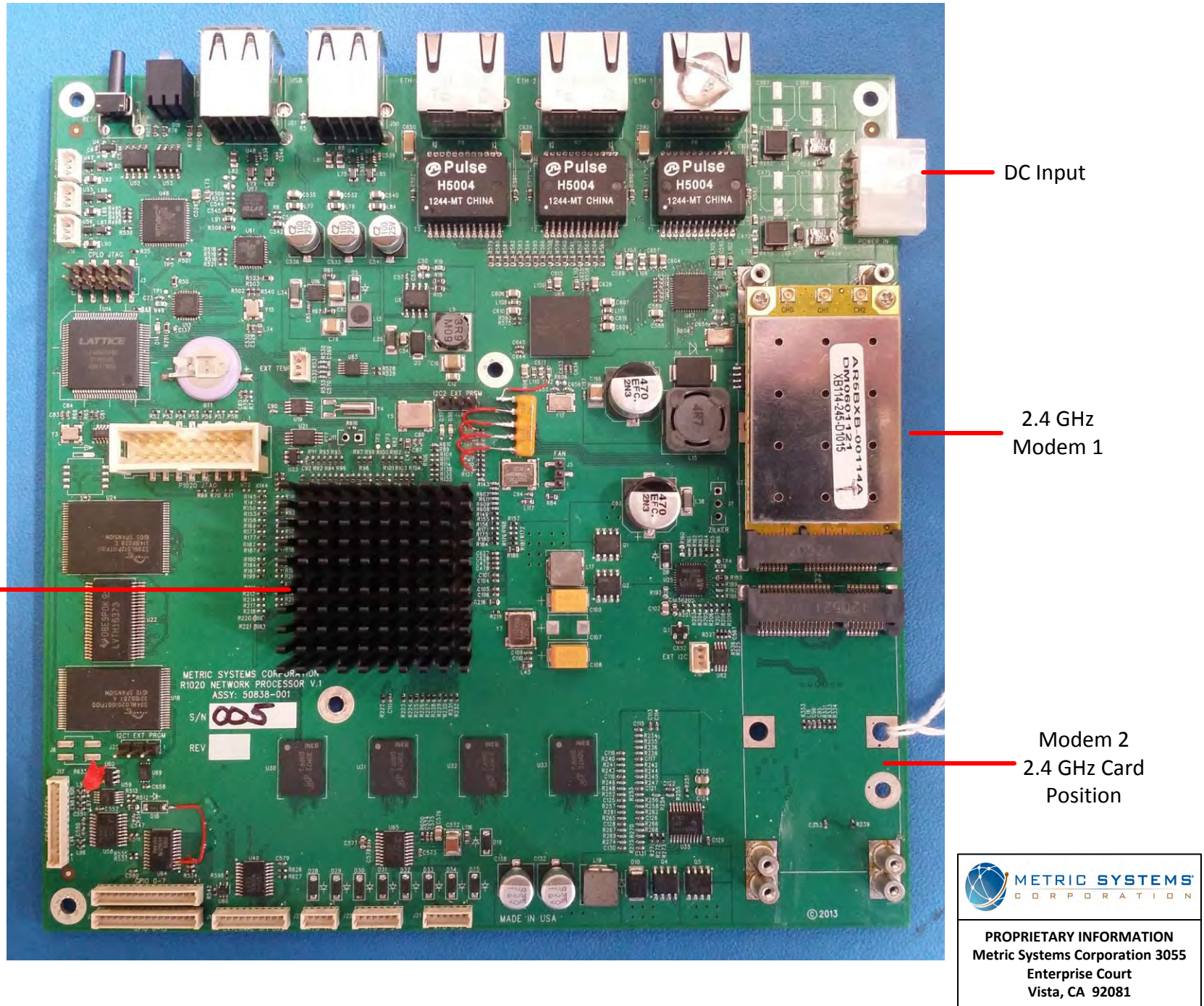
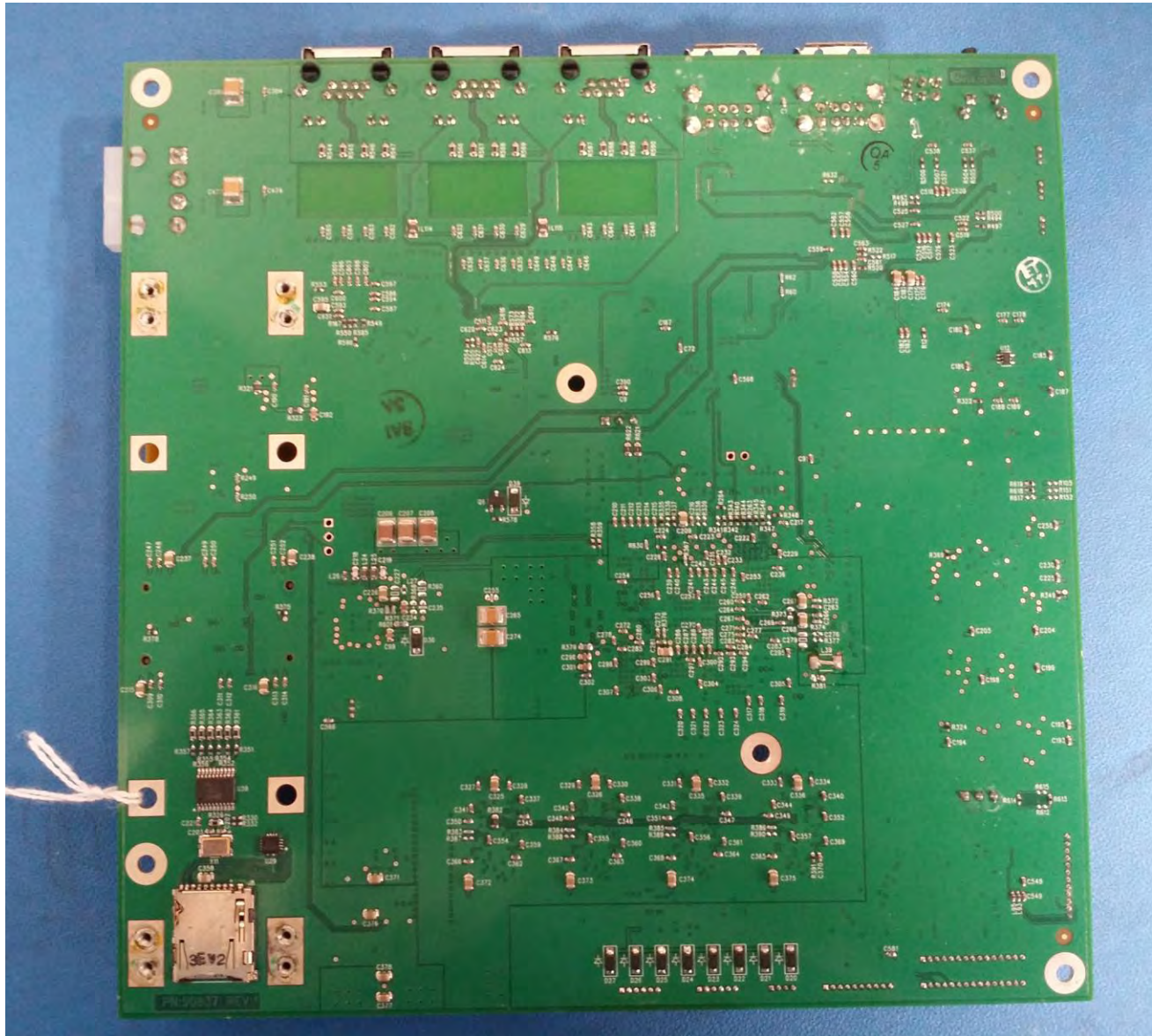


FIGURE 27: BOTTOM VIEW, NETWORK SHELF PROCESSOR



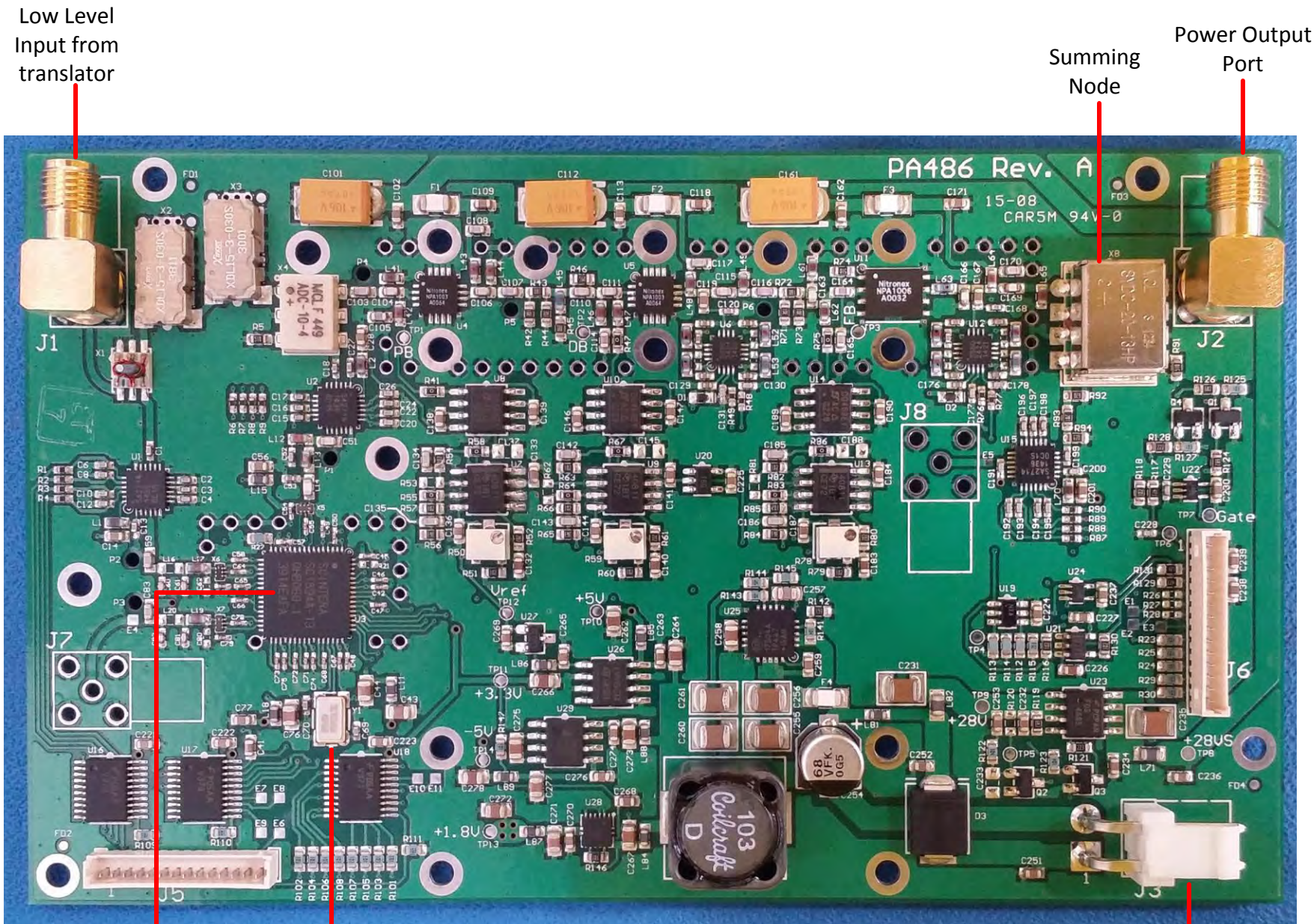
6.700"
6.700"



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FIGURE 28: TOP VIEW, LINEAR OUTPUT AMPLIFIER



Low Level
Input from
translator

Summing
Node

Power Output
Port

5.250"

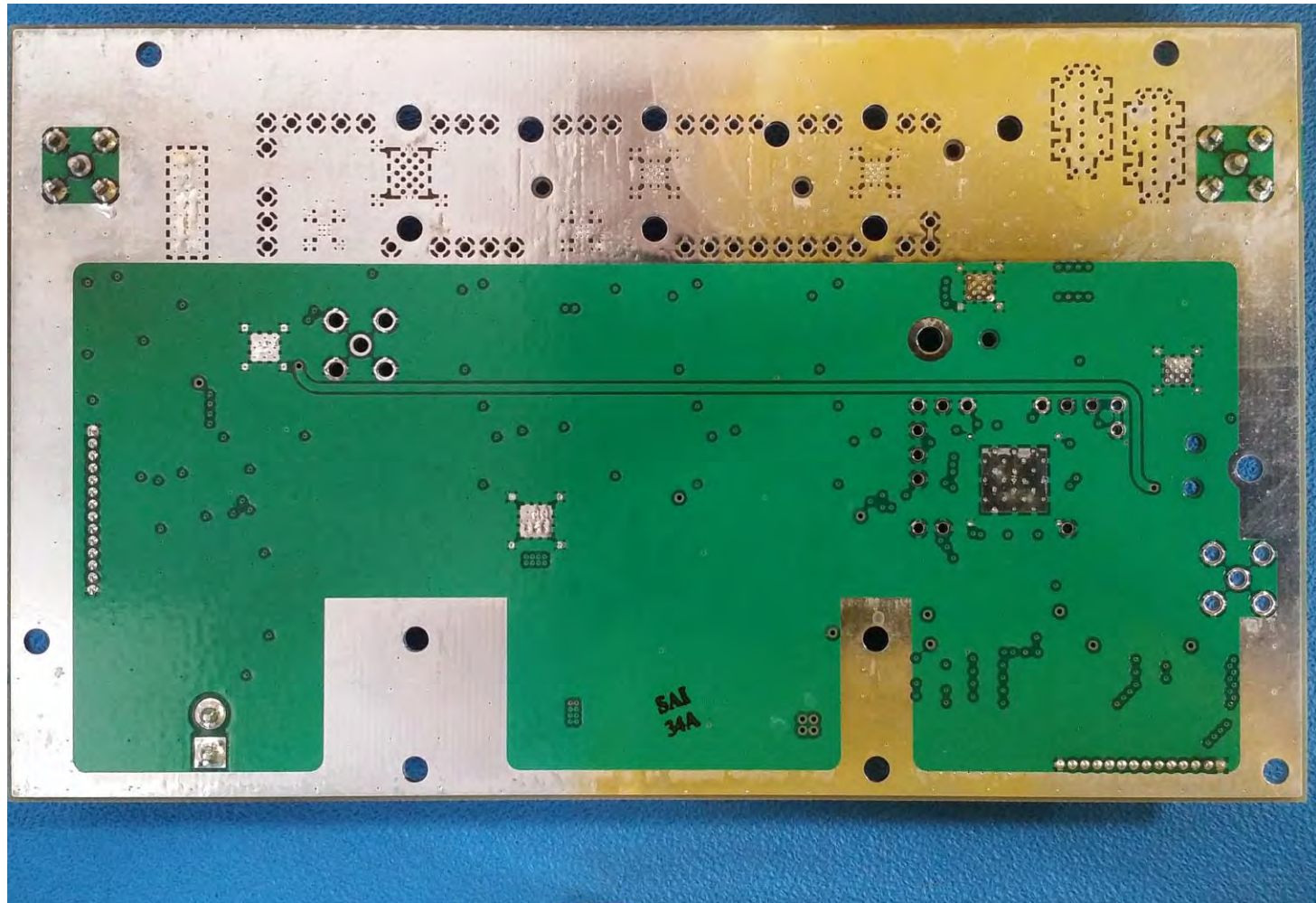
Maxim/Scintera
Wave Form
Linearizer

10 MHz XTAL

DC Input

3.150"

FIGURE 29: BOTTOM VIEW, LINEAR OUTPUT AMPLIFIER



3.150"
5.250"



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FIGURE 30: TOP VIEW, PROTOCOL TRANSLATOR BOARD

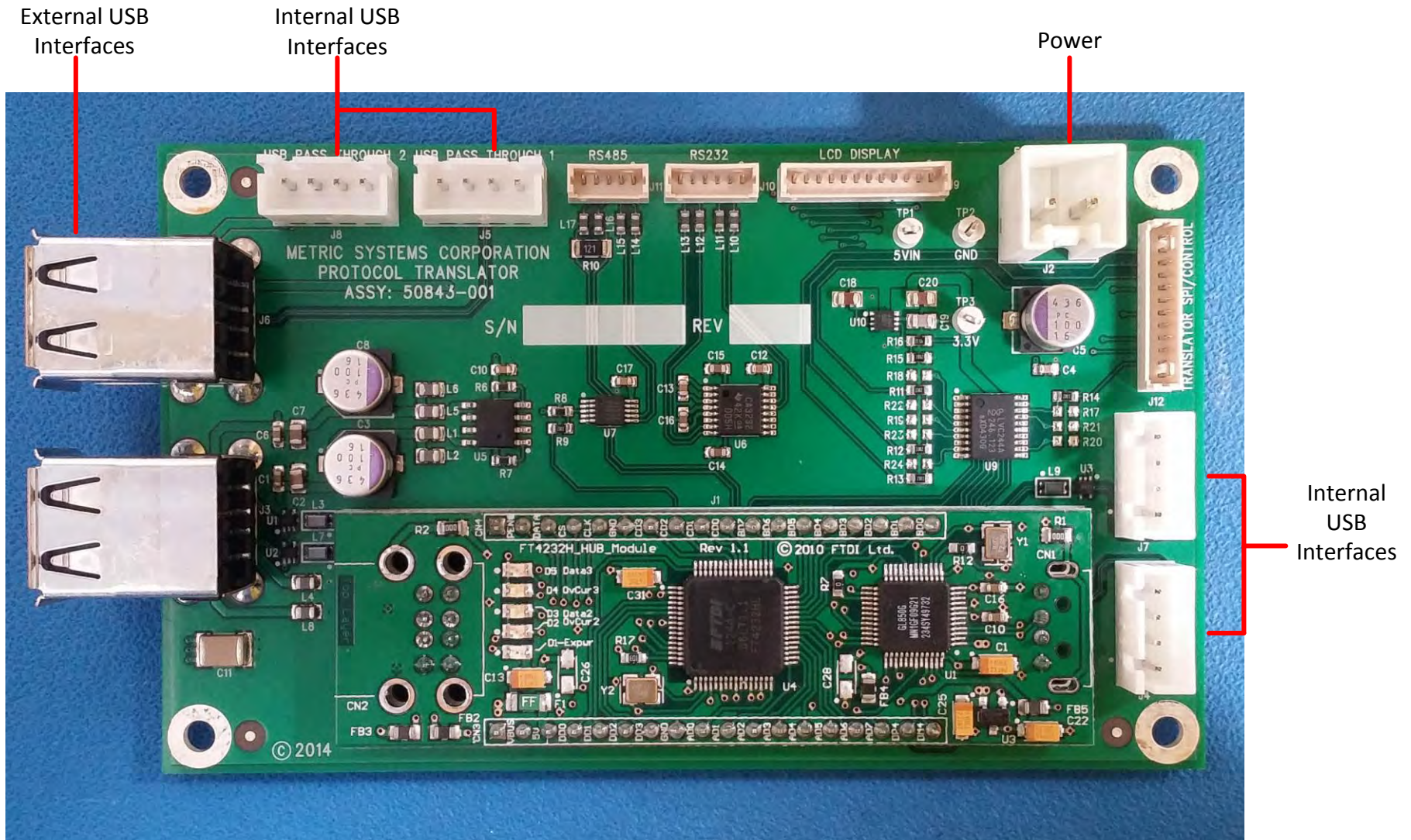
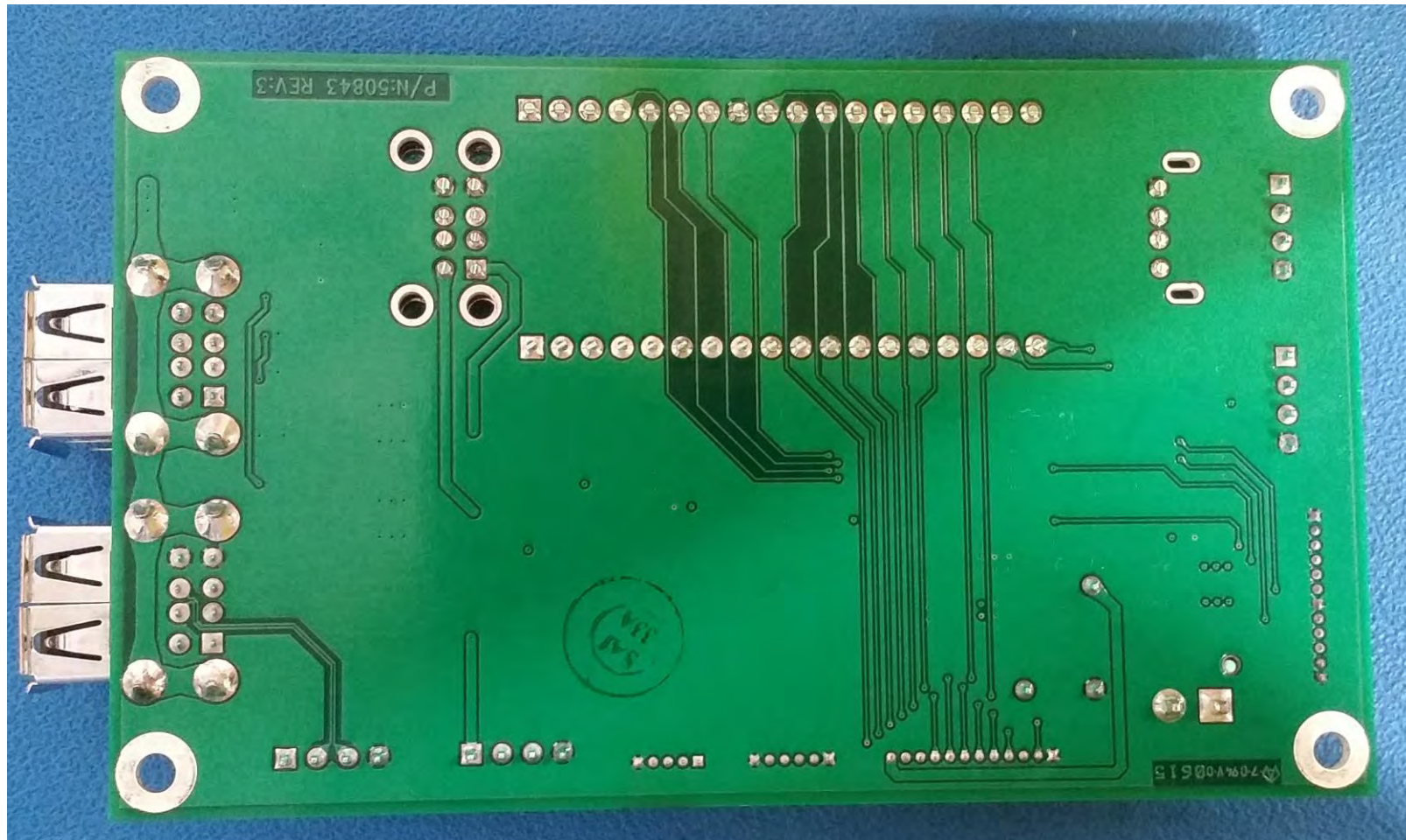
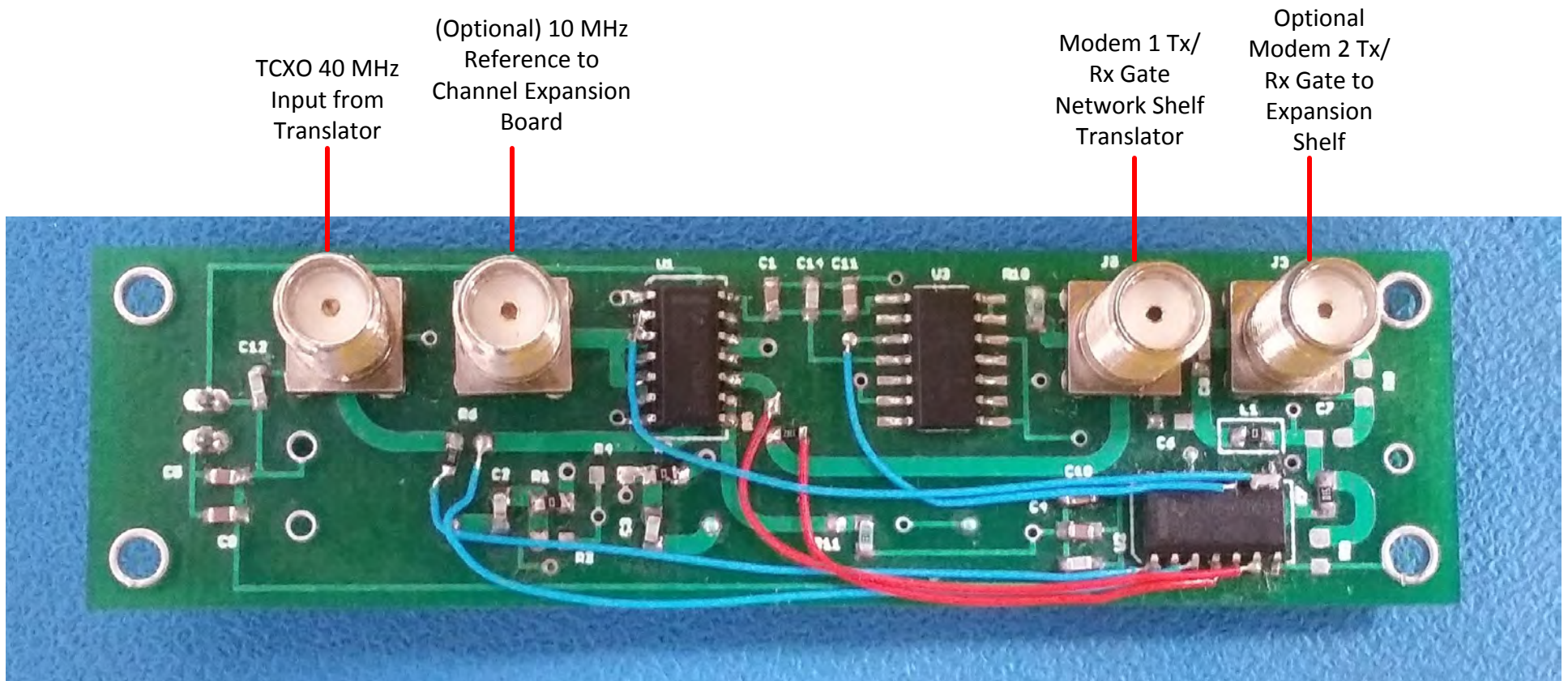


FIGURE 31: BOTTOM VIEW, PROTOCOL TRANSLATOR BOARD



2.500"
4.150"

FIGURE 32: TOP VIEW, CLOCK DISTRIBUTION BOARD



0.900

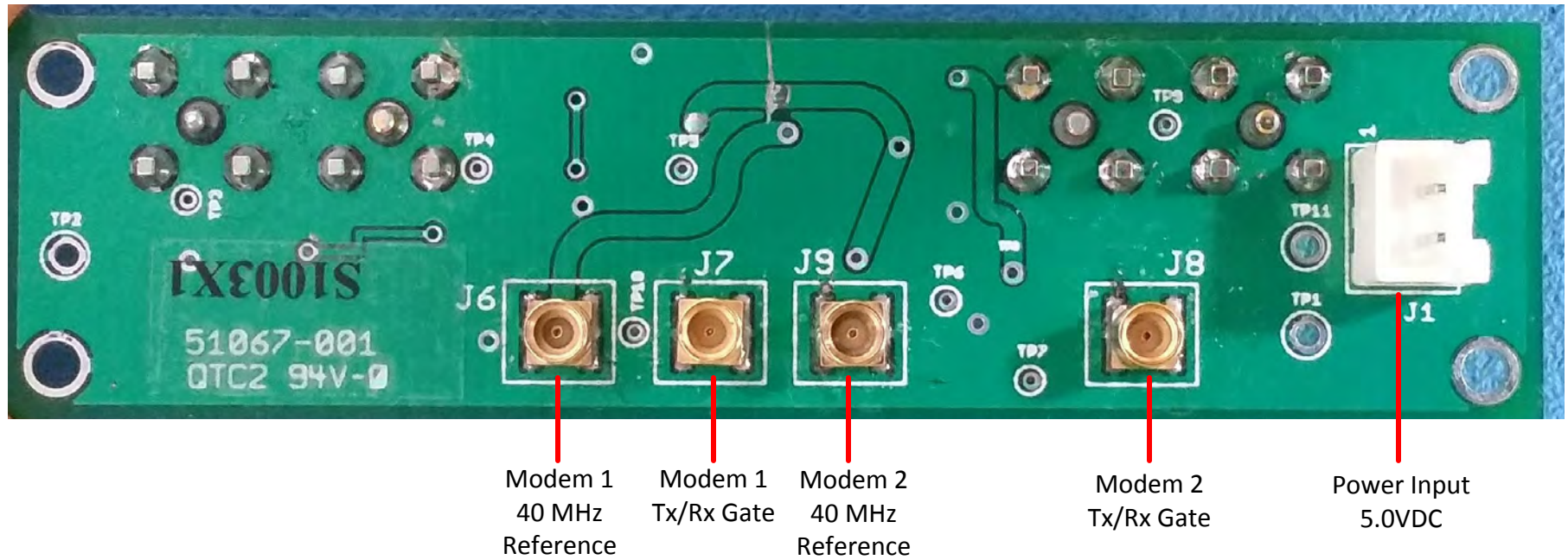
3.300



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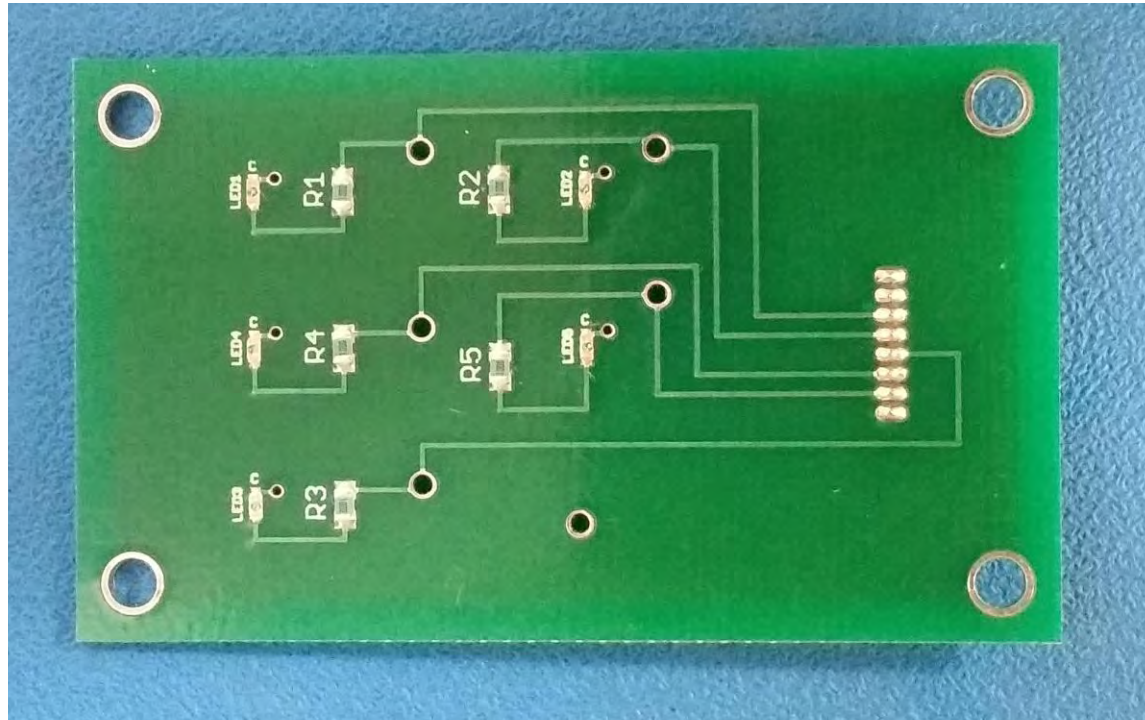
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FIGURE 33: BOTTOM VIEW, CLOCK DISTRIBUTION BOARD



0.900
3.300

FIGURE 34: TOP VIEW, NETWORK SHELF LED STATUS BOARD

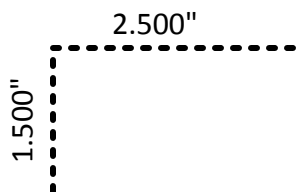
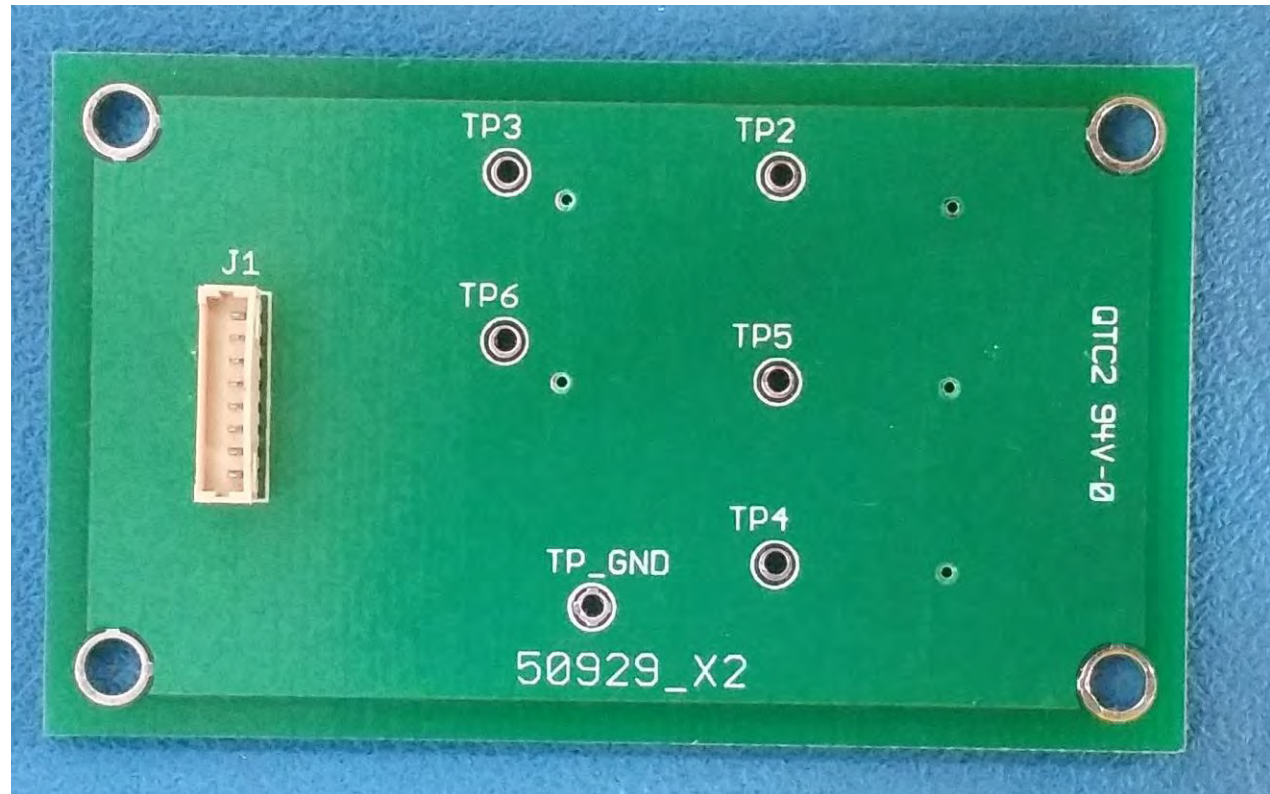


1.500"
2.500"



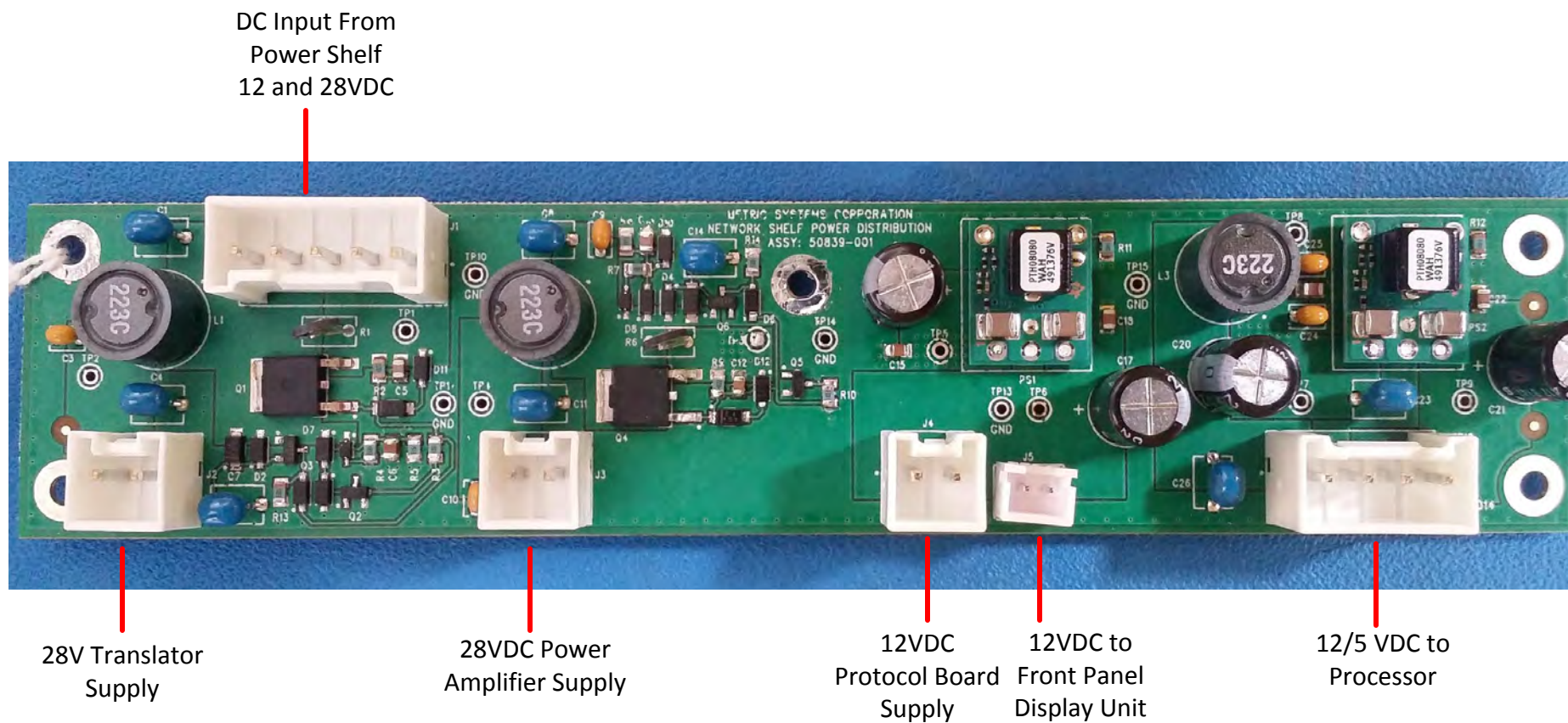
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FIGURE 35: BOTTOM VIEW, NETWORK SHELF LED STATUS BOARD



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FIGURE 36: TOP VIEW, NETWORK SHELF POWER DISTRIBUTION BOARD



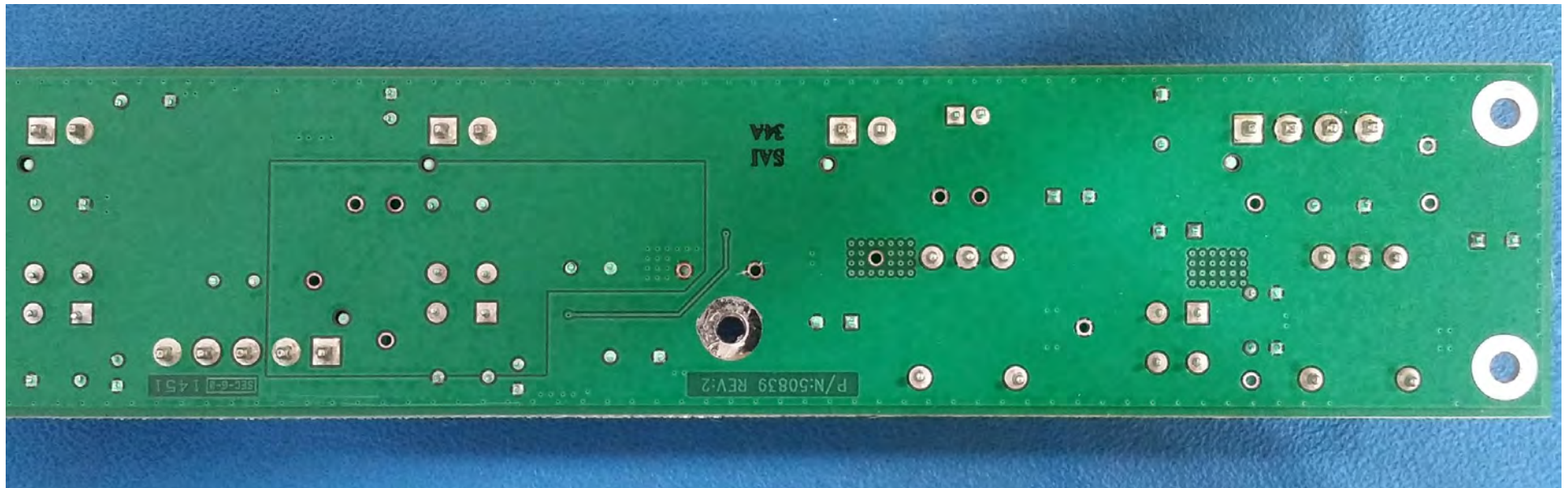
6.500"

1.400"



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FIGURE 37: BOTTOM VIEW, NETWORK SHELF POWER DISTRIBUTION BOARD



1.400"
6.500"

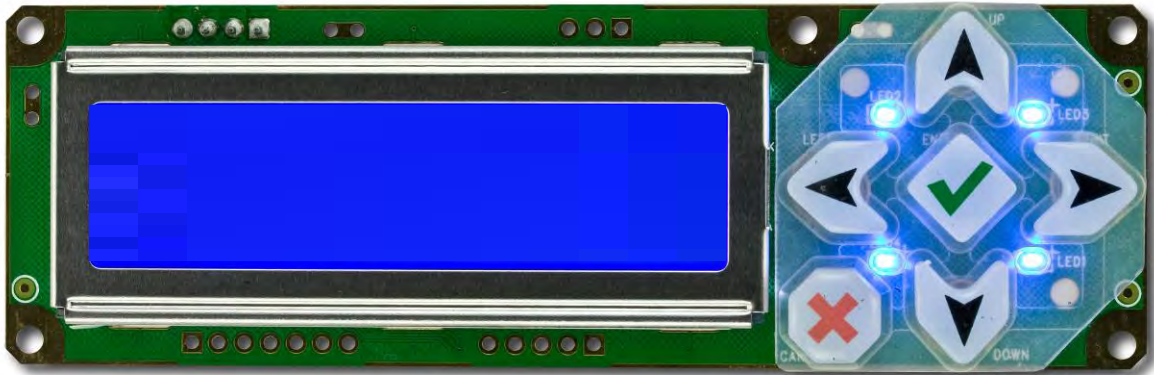


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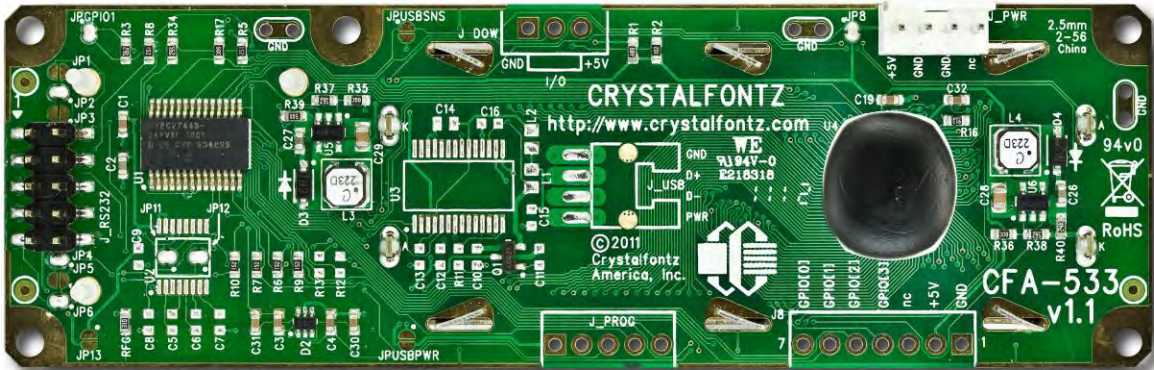
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FIGURE 38: TOP/BOTTOM VIEW, FRONT PANEL LCD BOARD

Top

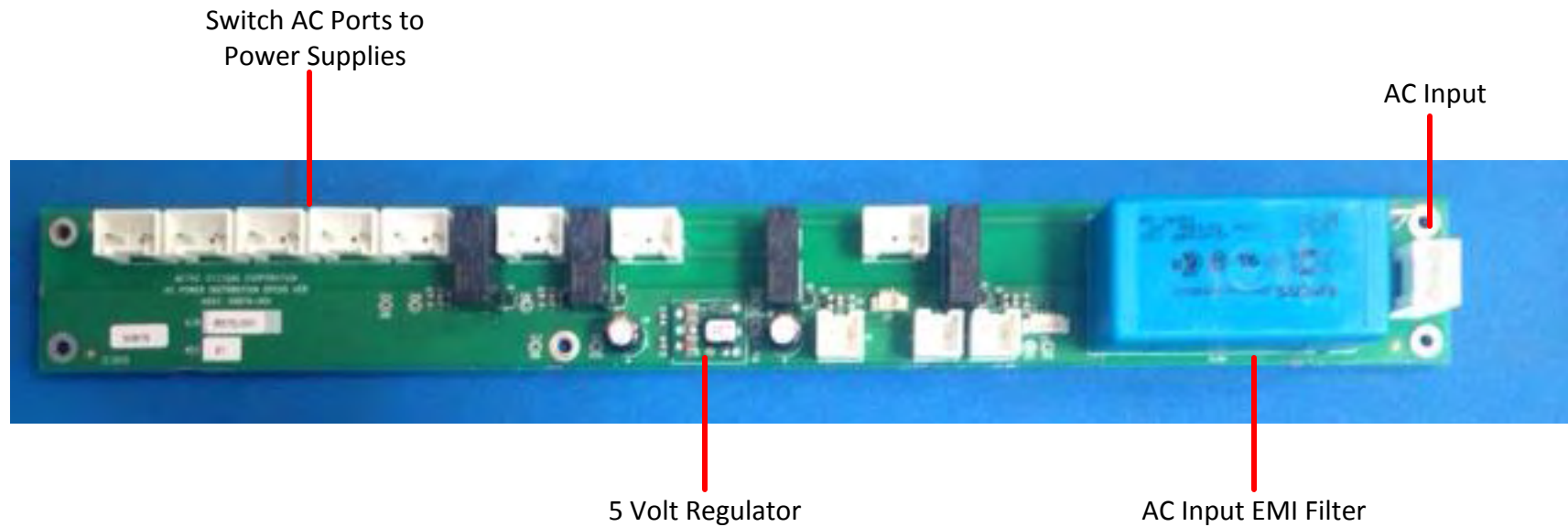


Bottom



4.350"
1.380"

FIGURE 39: TOP VIEW, POWER SUPPLY SHELF'S AC INPUT BOARD

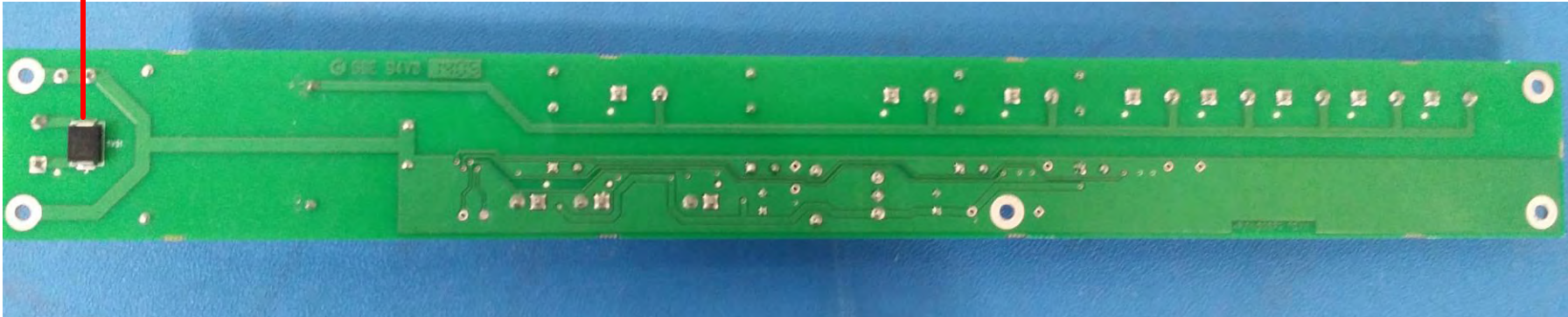


See Schematic for Details

12.000"
1.400"

FIGURE 40: BOTTOM VIEW, POWER SUPPLY SHELF'S AC INPUT BOARD

Input Transient
Protection



12.000"

1.400"

FIGURE 41: TOP VIEW, POWER MANAGEMENT BOARD

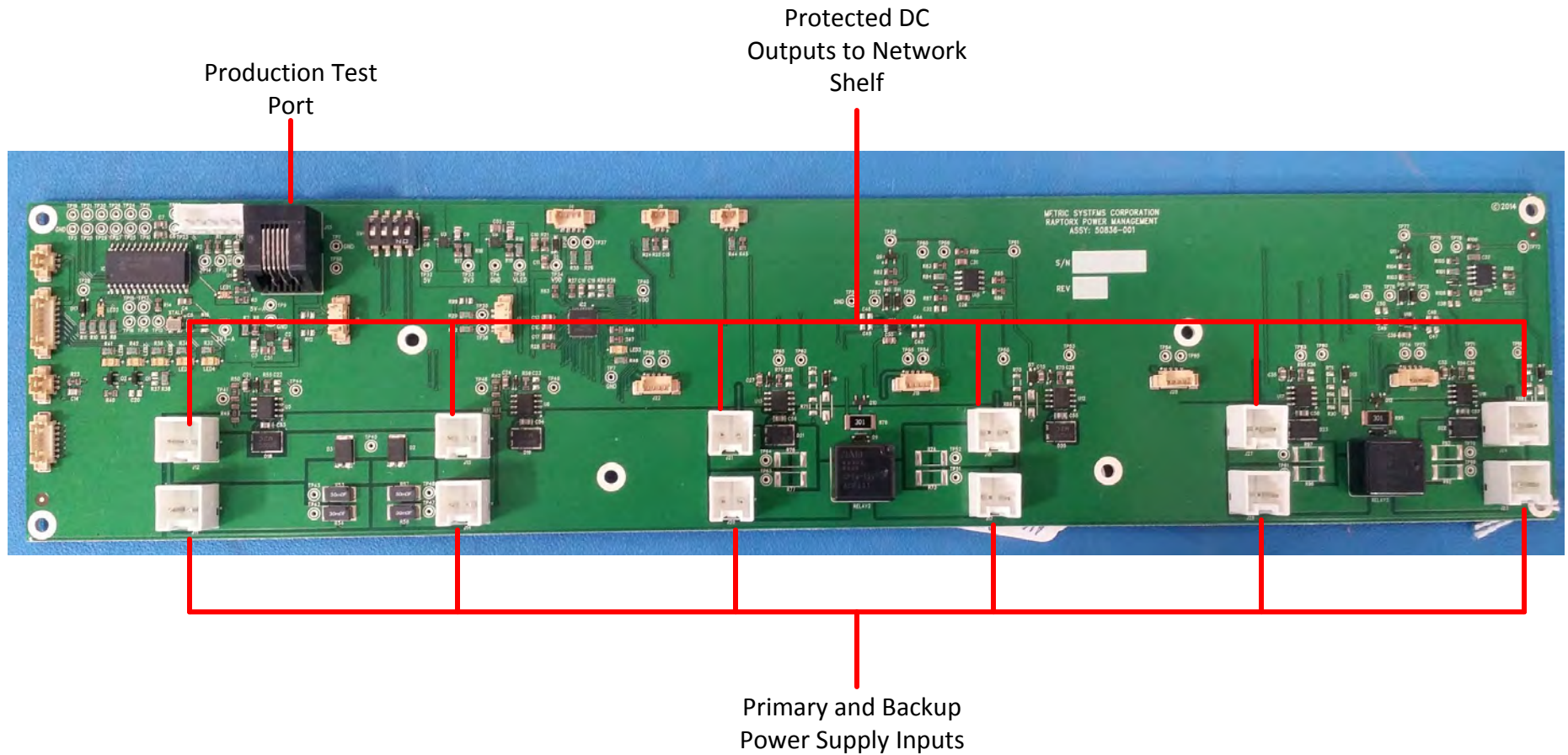
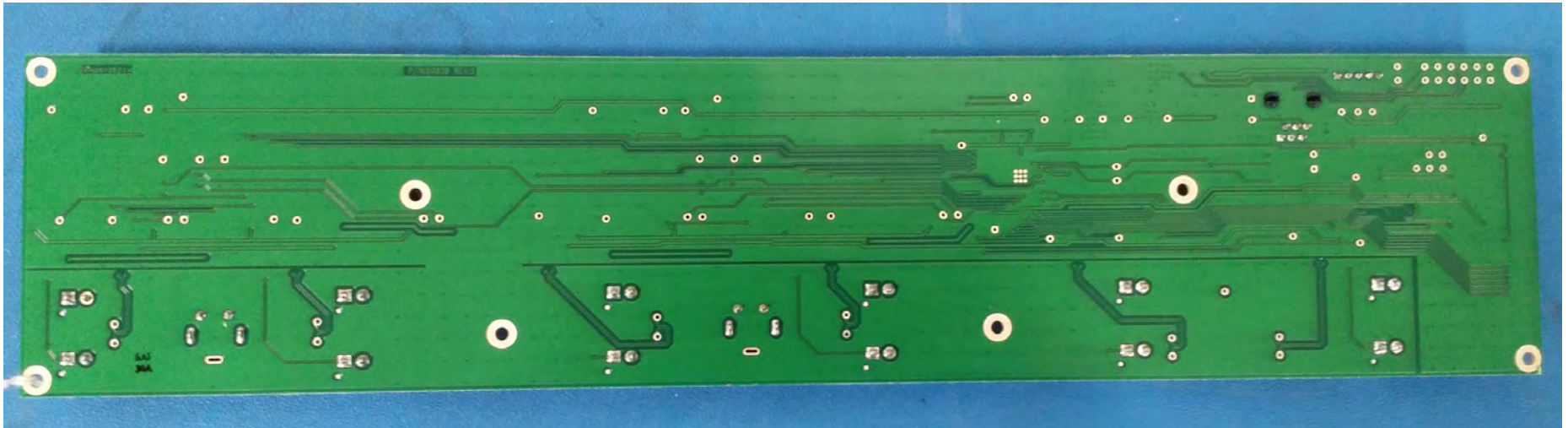
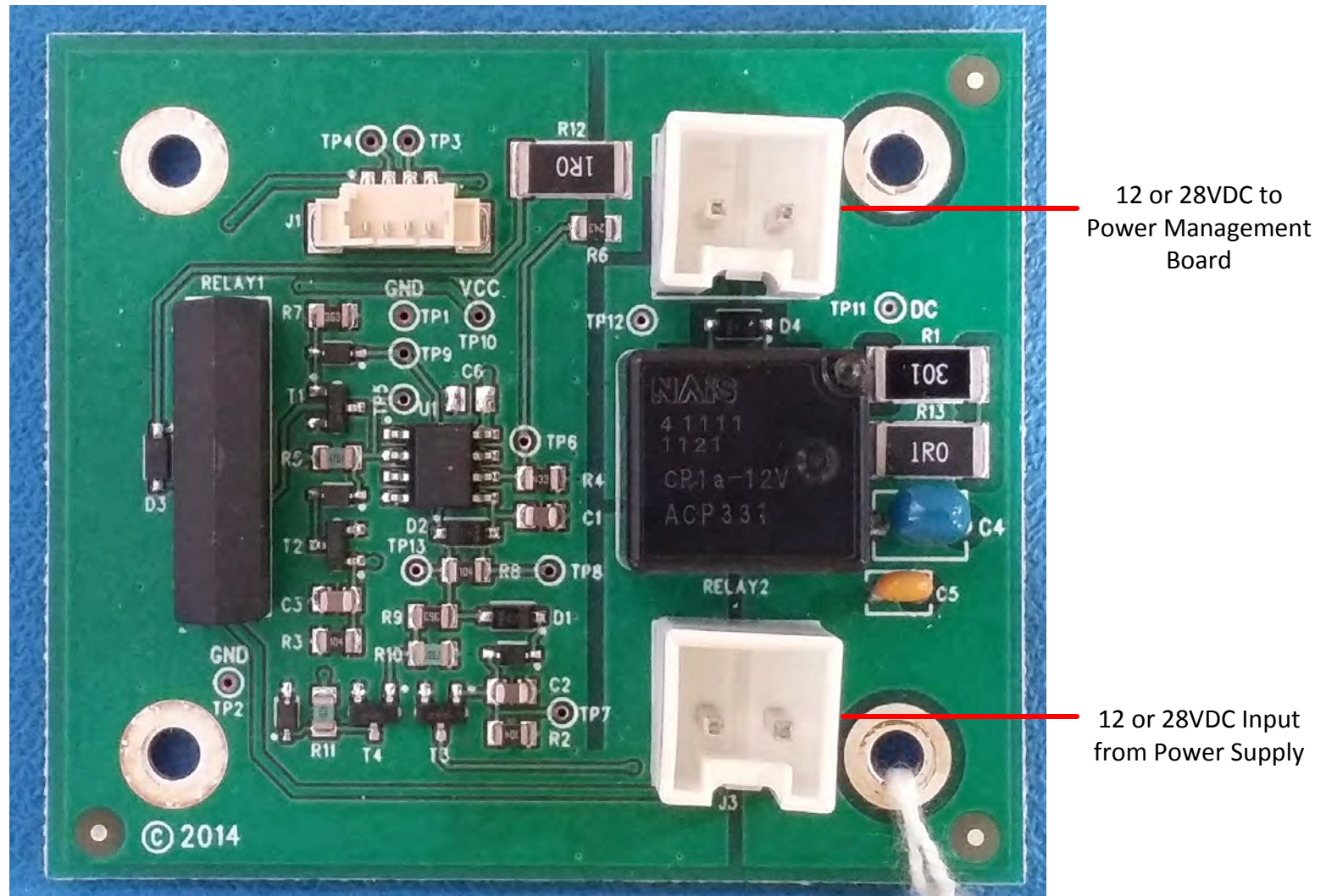


FIGURE 42: BOTTOM VIEW, POWER MANAGEMENT BOARD



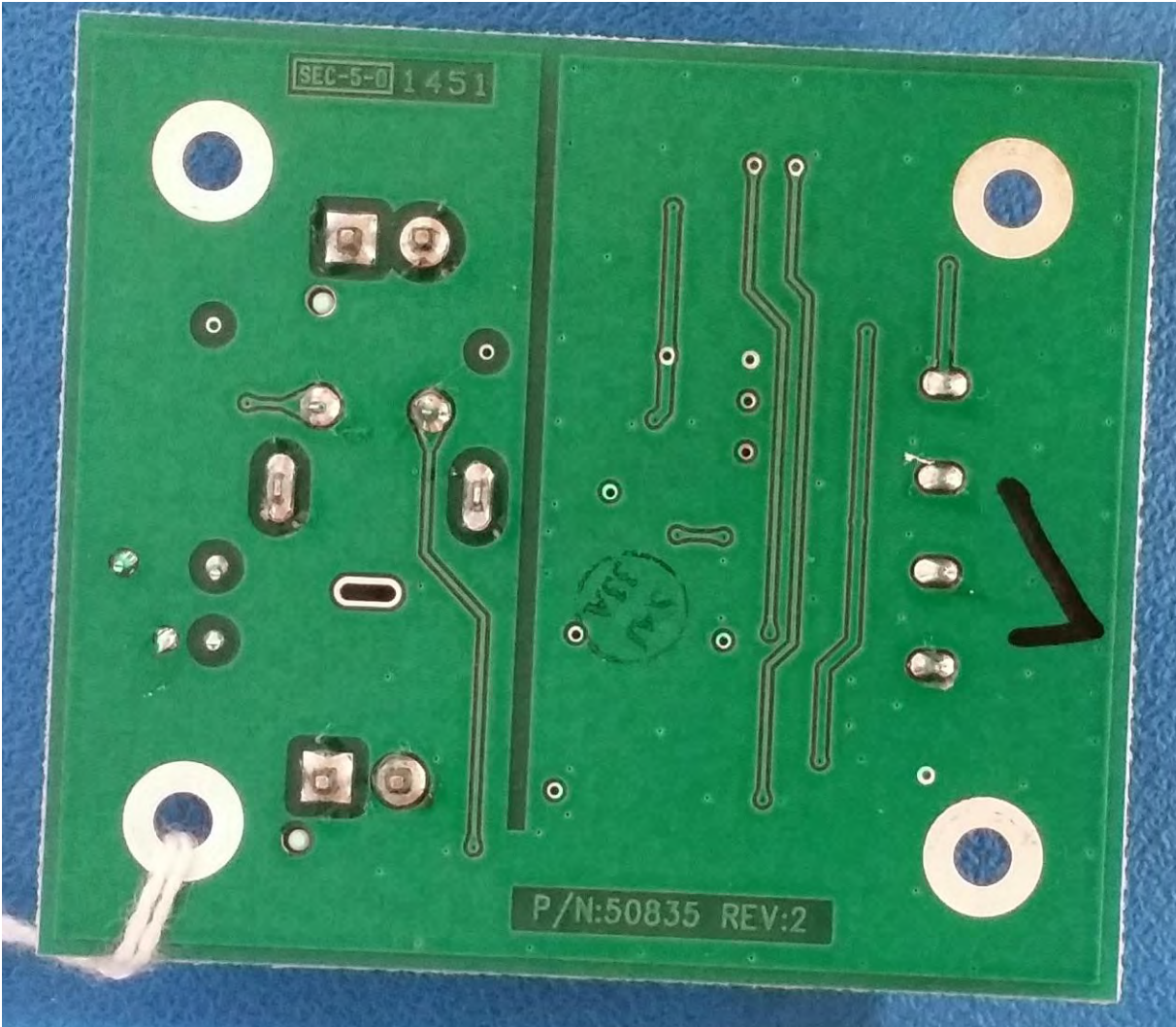
3.000" 13.750"

FIGURE 43: TOP VIEW, POWER APPLY BOARD (USED IN POWER SUPPLY SHELF)



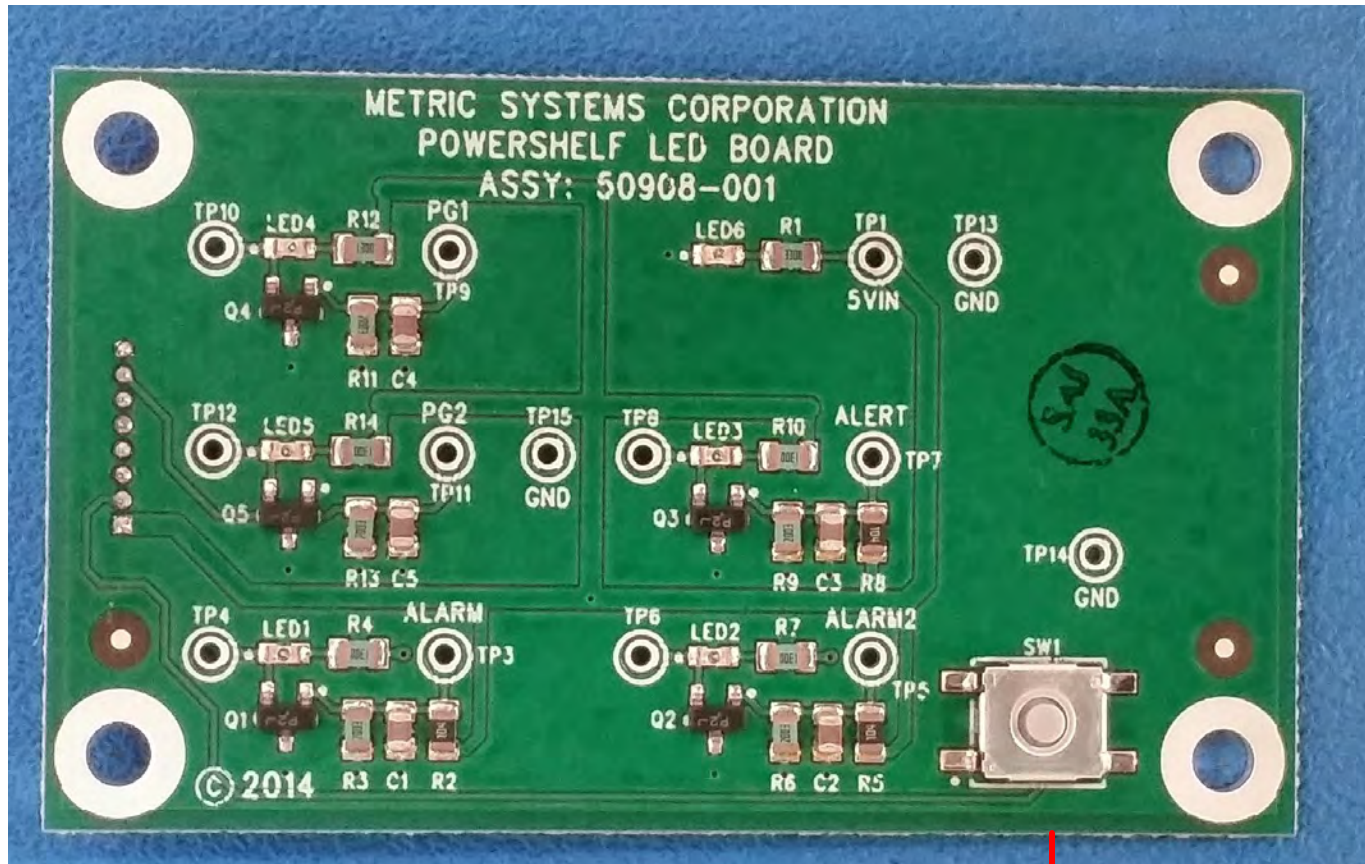
2.000"
2.300"

FIGURE 44: BOTTOM VIEW, POWER APPLY BOARD (USED IN POWER SUPPLY SHELF)



2.000"
2.300"

FIGURE 45: TOP VIEW, POWER SHELF FRONT PANEL LED STATUS BOARD



System Reset

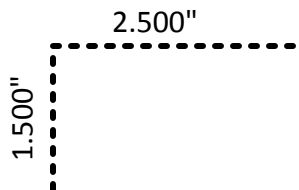
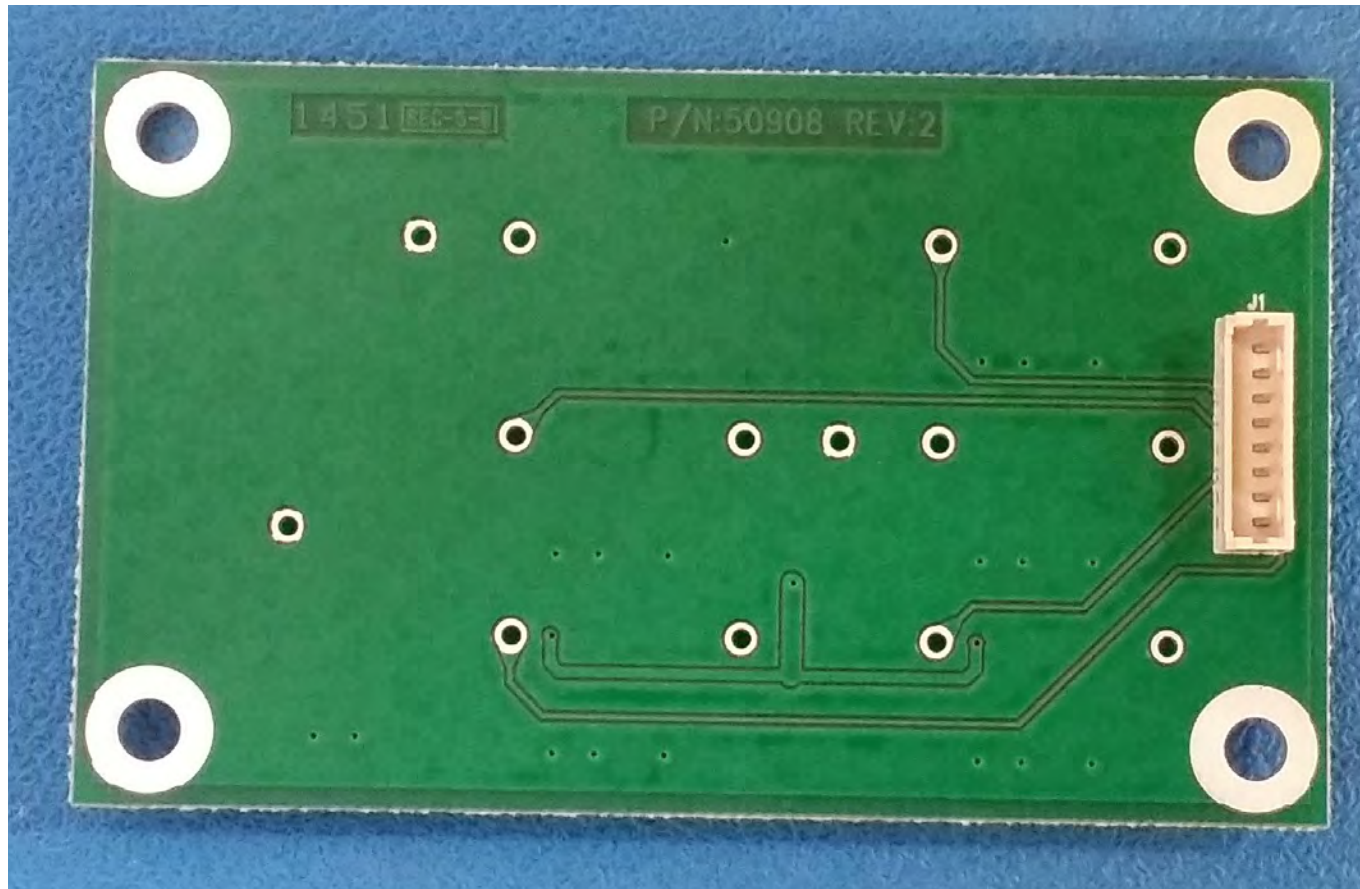


FIGURE 46: BOTTOM VIEW, POWER SHELF FRONT PANEL LED STATUS BOARD

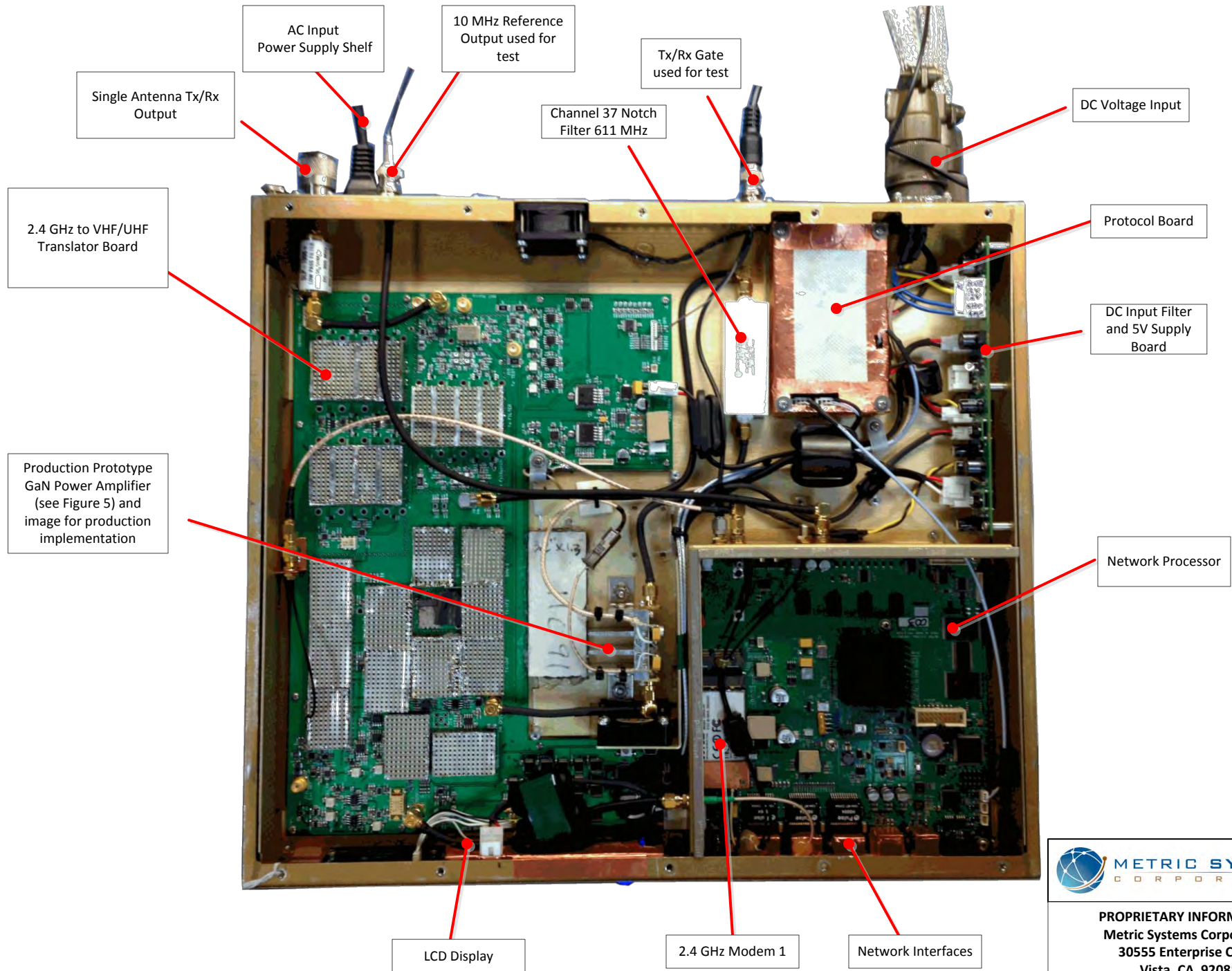


1.500"
2.500"



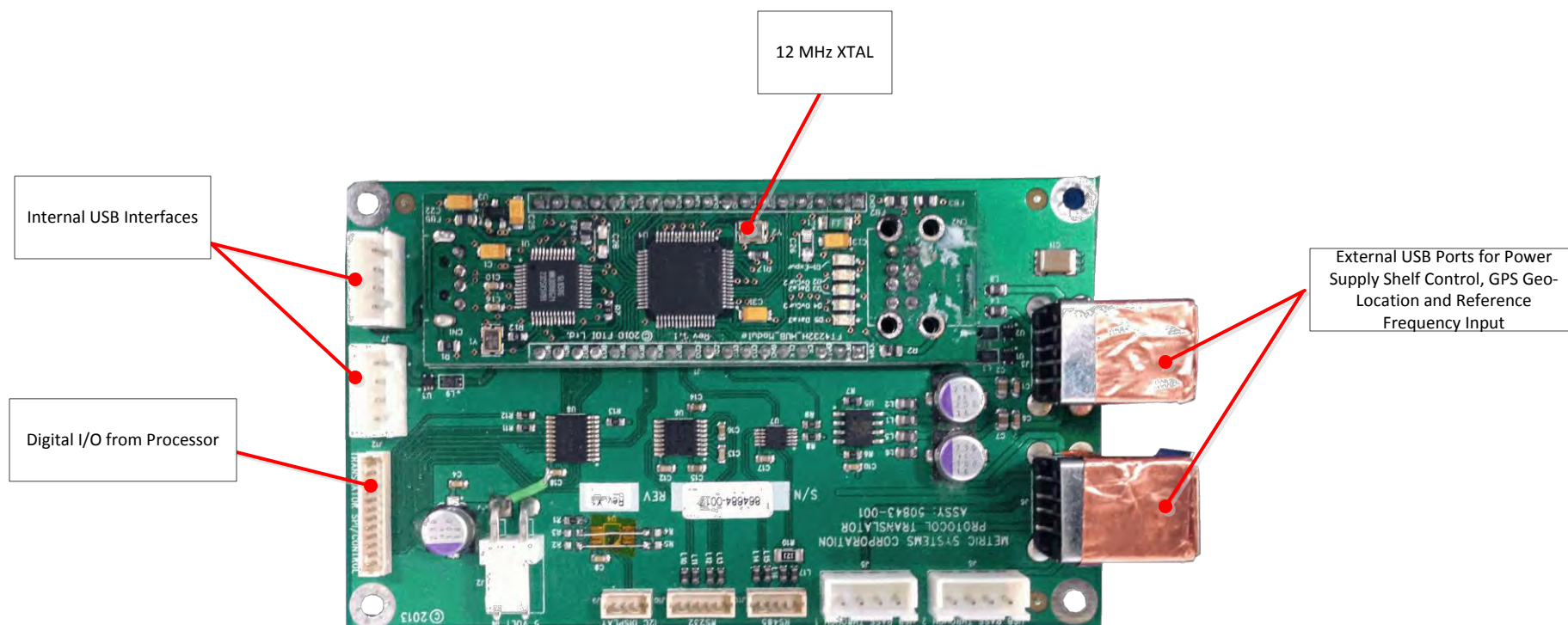
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FIGURE 47: TOP VIEW OF INTERNAL RAPTORX SINGLE CHANNEL SHELF (EUT)



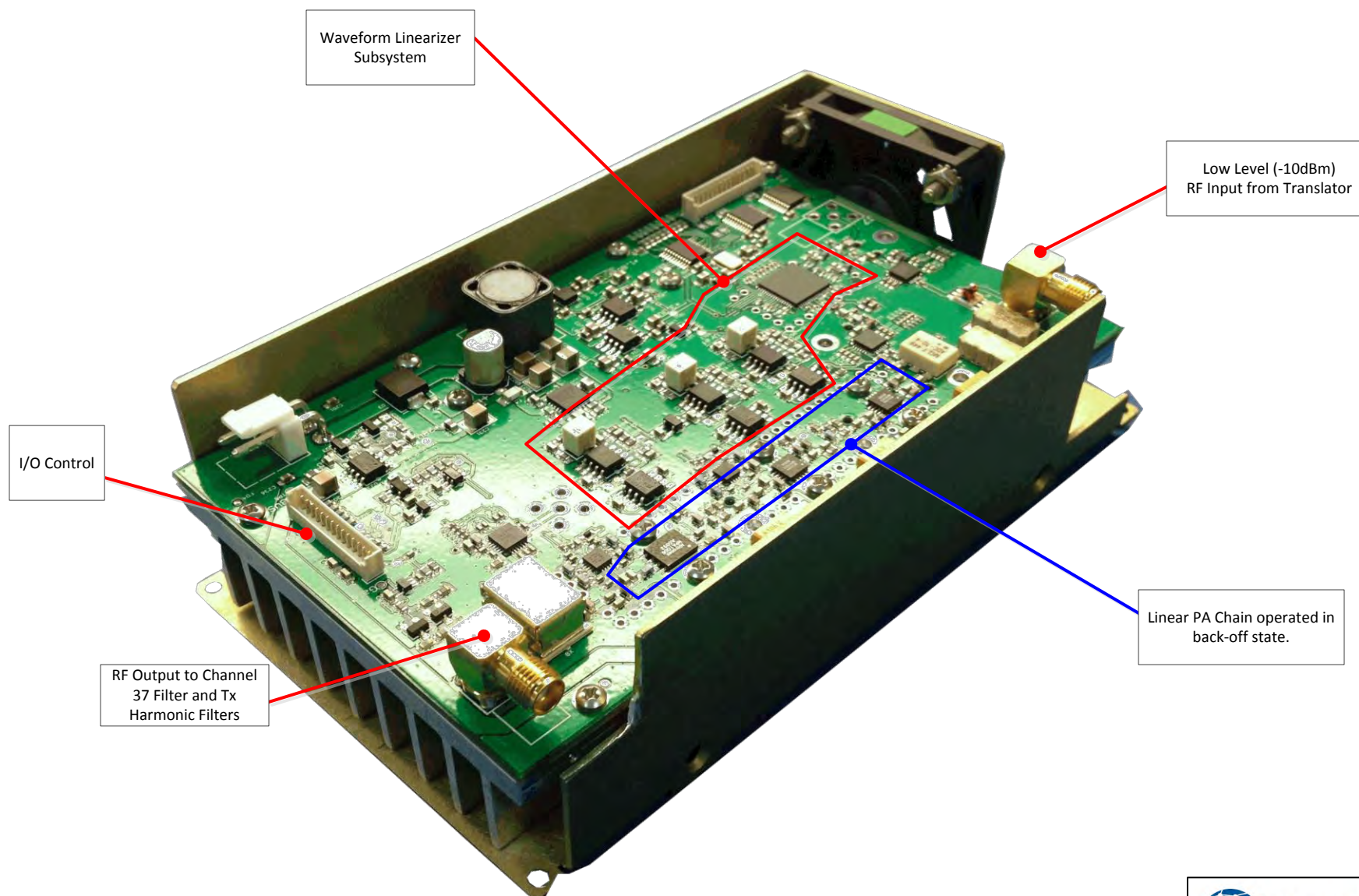
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FIGURE 48: TOP VIEW RAPTORX PRODUCTION PROTOCOL BOARD



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FIGURE 49: TOP VIEW RAPTORX 3 WATT LINEAR AMPLIFIER (PRODUCTION)
(Replaces Production Prototype Module used in EUT Testing)



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FIGURE 50: TOP VIEW RAPTORX REDUNDANT POWER SUPPLY SHELF

