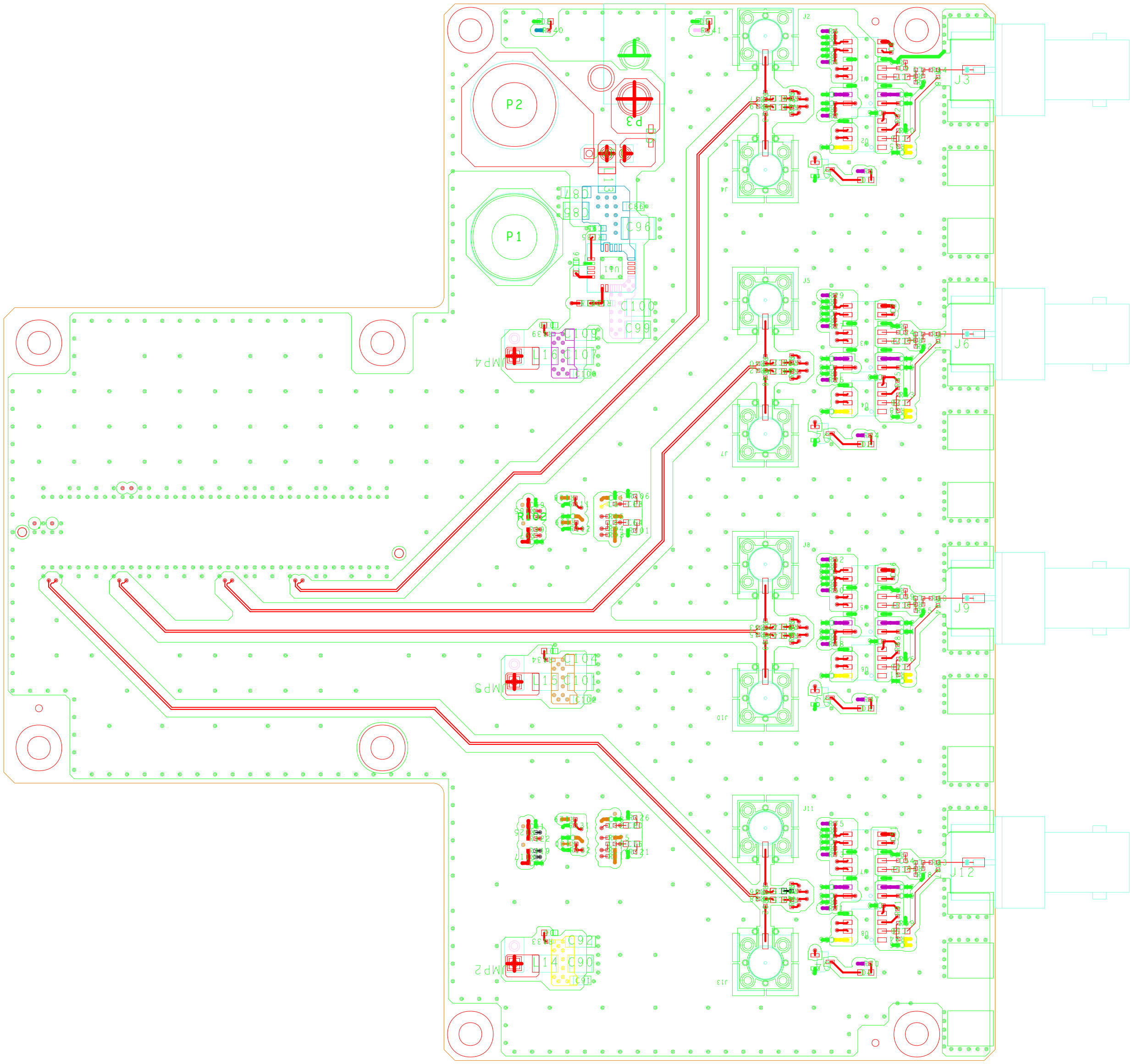


CUSTOMER:
TEXAS INSTRUMENTS

KSID:
15254

JOB NUMBER:
123933

BOARD NAME:
TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION:
TOP, LAYER 1

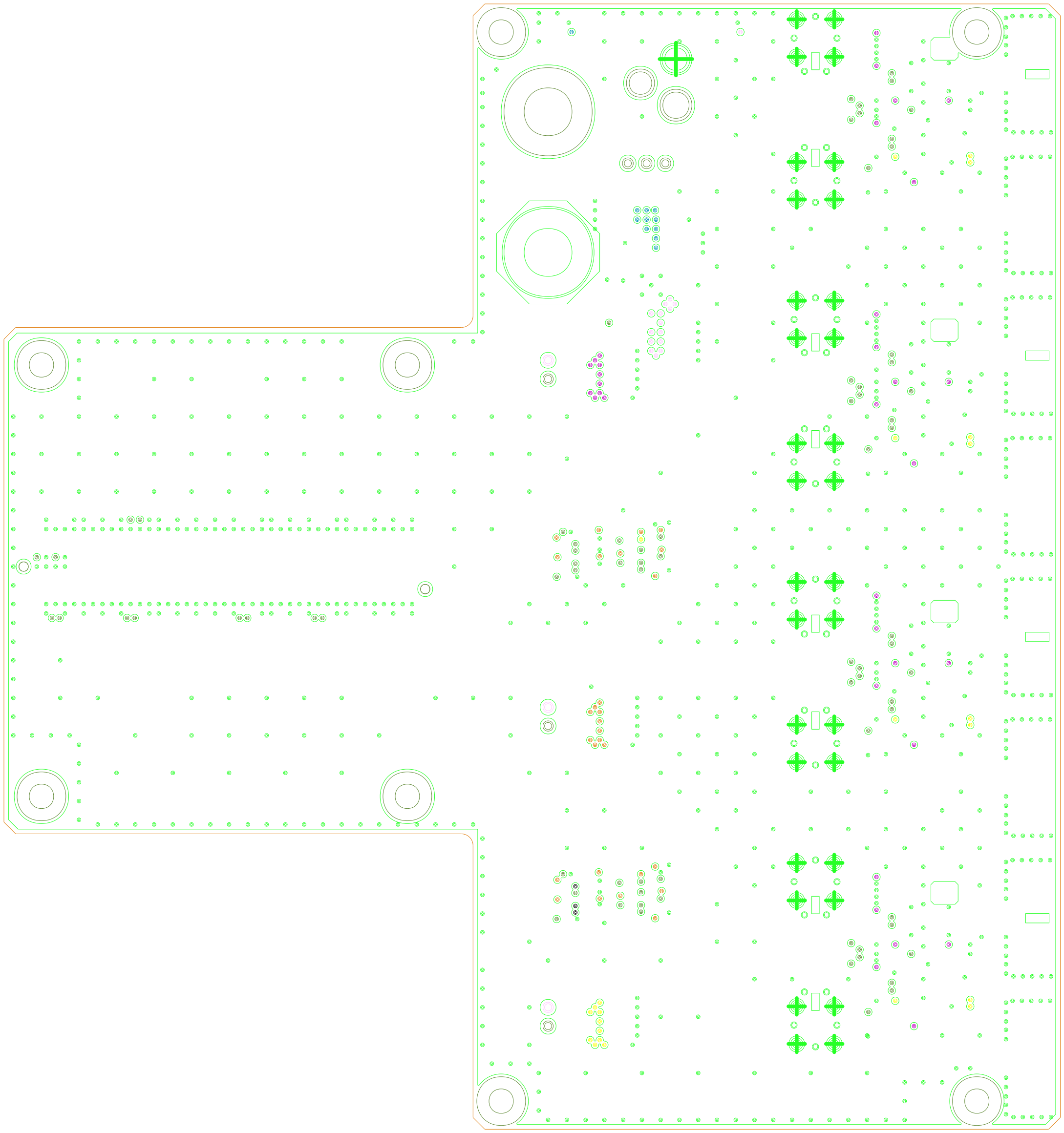
ENGINEER:
J. NERGER

PCB DESIGNER:
M. THREET

BOARD REV:
1.0

RELEASE DATE:
08/15/2014

SHEET NUMBER:
1 of 13



CUSTOMER:
TEXAS INSTRUMENTS

KSID:
15254

JOB NUMBER:
123933

BOARD NAME:
TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION:
GND1, LAYER 2

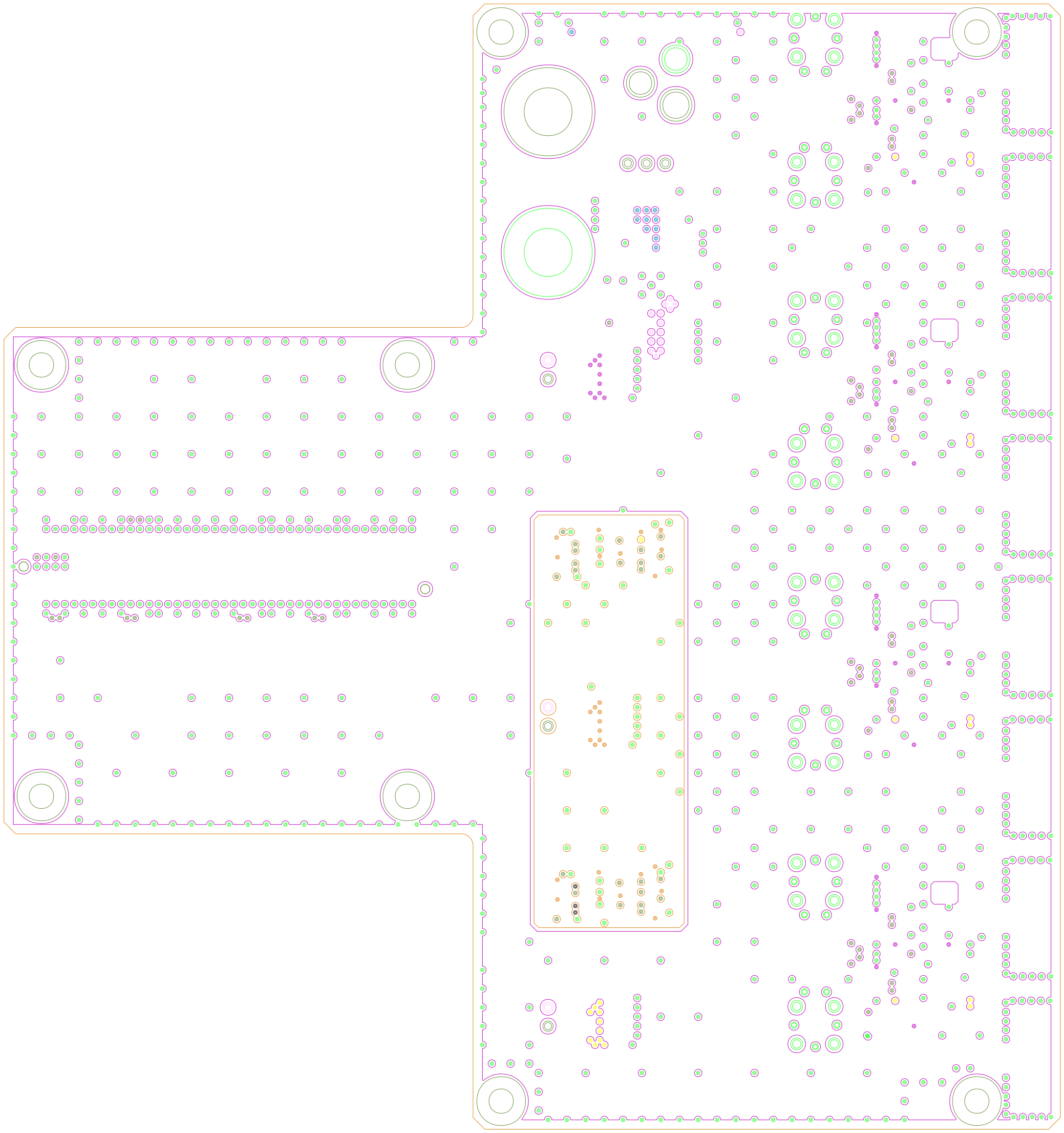
ENGINEER:
J. NERGER

PCB DESIGNER:
M. THREET

BOARD REV:
1.0

RELEASE DATE:
08/15/2014

SHEET NUMBER:
2 of 13



Krypton
systems

CUSTOMER:
TEXAS INSTRUMENTS

KSID:
15254

JOB NUMBER:
123933

BOARD NAME:
TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION:
GND2, LAYER 3

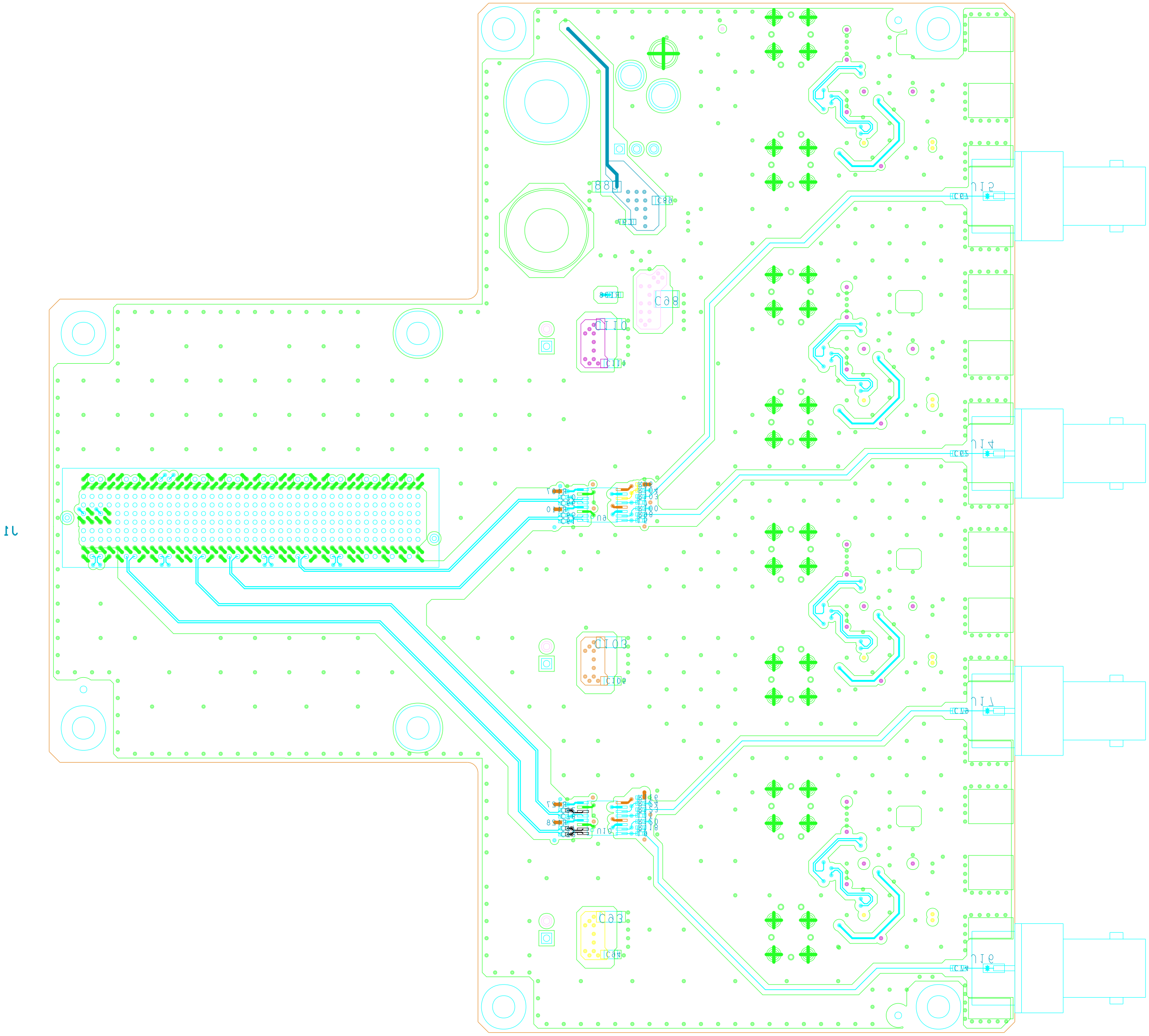
ENGINEER:
J. NERGER

PCB DESIGNER:
M. THREET

BOARD REV:
1.0

RELEASE DATE:
08/15/2014

SHEET NUMBER:
3 of 13



Krypton systems

CUSTOMER:
TEXAS INSTRUMENTS

KSID:
15254

JOB NUMBER:
123933

BOARD NAME:
TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION:
BOTTOM, LAYER 6

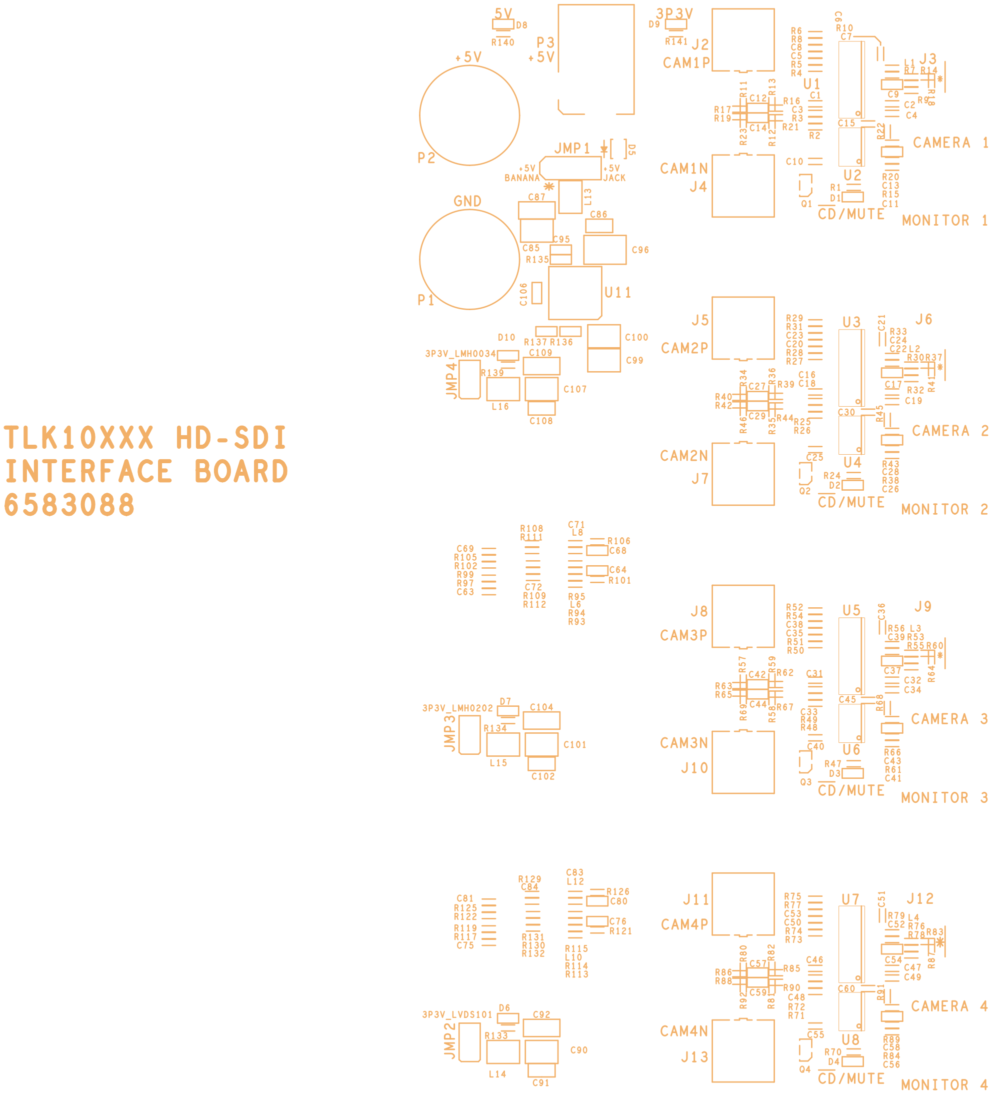
ENGINEER:
J. NERGER

PCB DESIGNER:
M. THREET

BOARD REV:
1.0

RELEASE DATE:
08/15/2014

SHEET NUMBER:
6 of 13



CUSTOMER: TEXAS INSTRUMENTS
KSID: 15254
JOB NUMBER: 123933
BOARD NAME: TLK10XXX HD-SDI DAUGHTER BOARD
LAYER DESCRIPTION: SILKSCREEN TOP
ENGINEER: J. NERGER
PCB DESIGNER: M. THREET
BOARD REV: 1.0
RELEASE DATE: 08/15/2014
SHEET NUMBER: 9 of 13

Krypton systems

CUSTOMER:
TEXAS INSTRUMENTS

KSID:
15254

JOB NUMBER:
123933

BOARD NAME:
TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION:
SILKSCREEN BOTTOM

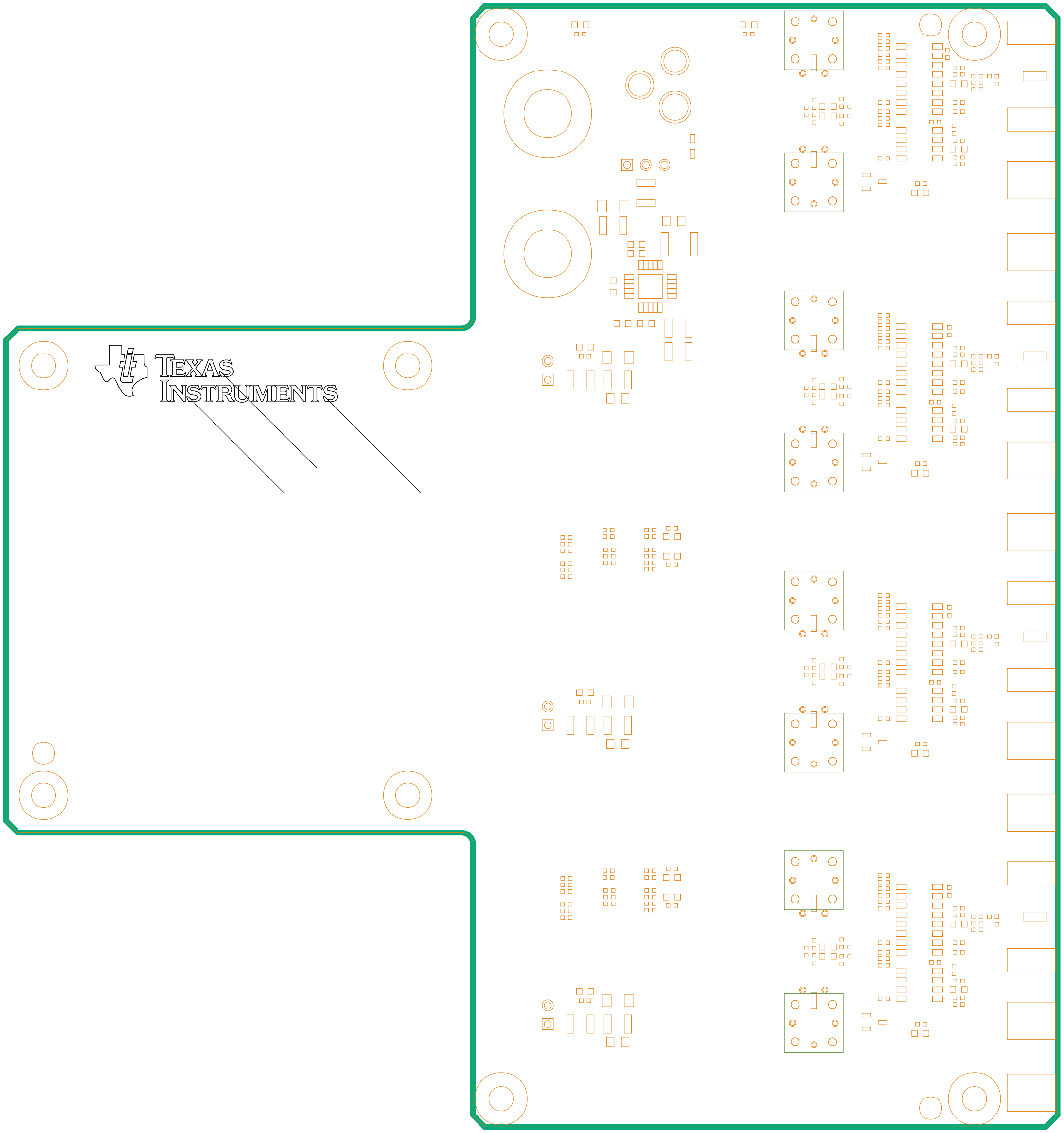
ENGINEER:
J. NERGER

PCB DESIGNER:
M. THREET

BOARD REV:
1.0

RELEASE DATE:
08/15/2014

SHEET NUMBER:
10 of 13



CUSTOMER: TEXAS INSTRUMENTS

KSID: 15254

JOB NUMBER: 123933

BOARD NAME: TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION: **SOLDERMASK TOP**

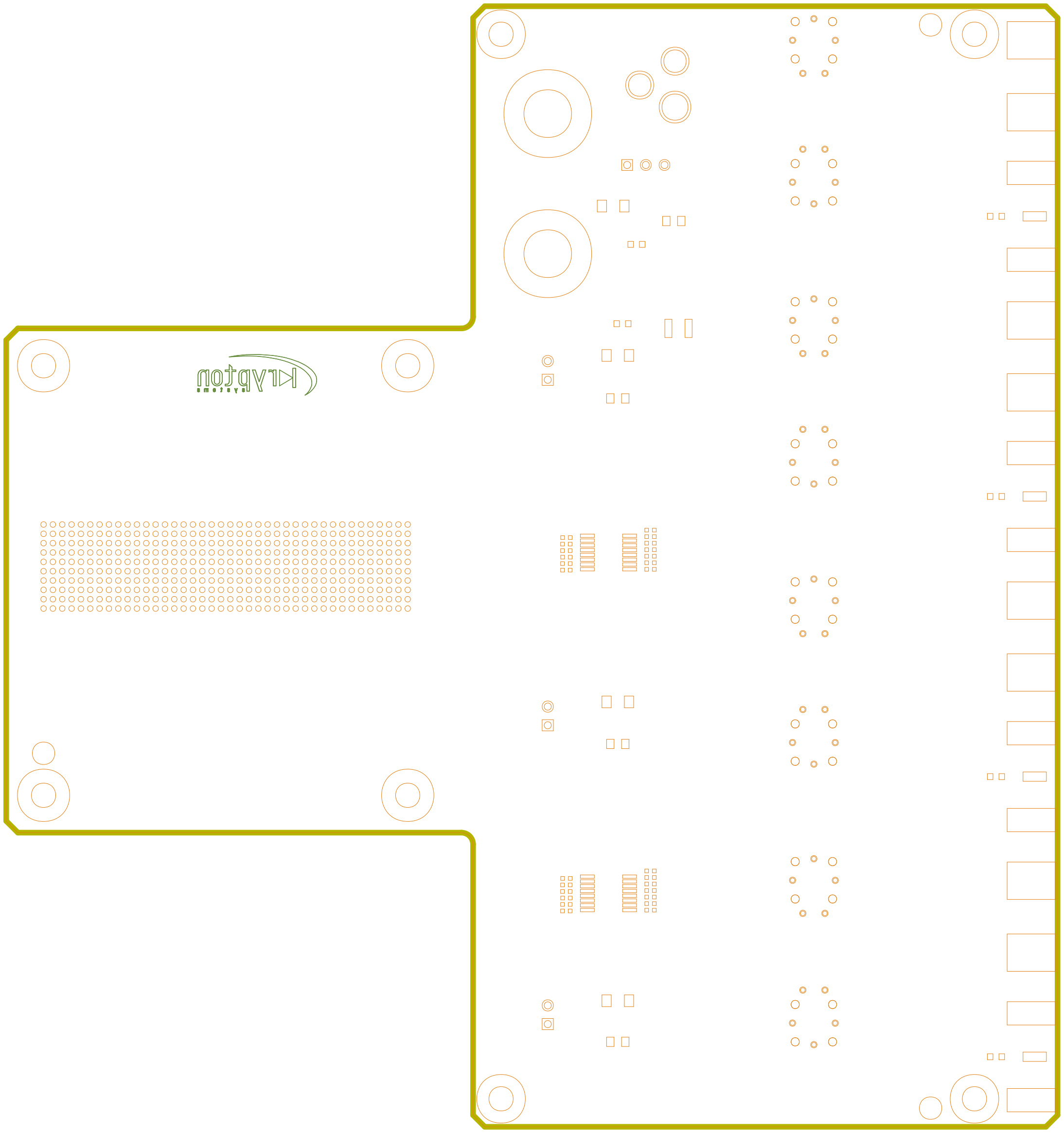
ENGINEER: J. NERGER

PCB DESIGNER: M. THREET

BOARD REV: 1.0

RELEASE DATE: 08/15/2014

SHEET NUMBER: **7** of 13



CUSTOMER:
TEXAS INSTRUMENTS

KSID:
15254

JOB NUMBER:
123933

BOARD NAME:
TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION:
SOLDERMASK BOTTOM

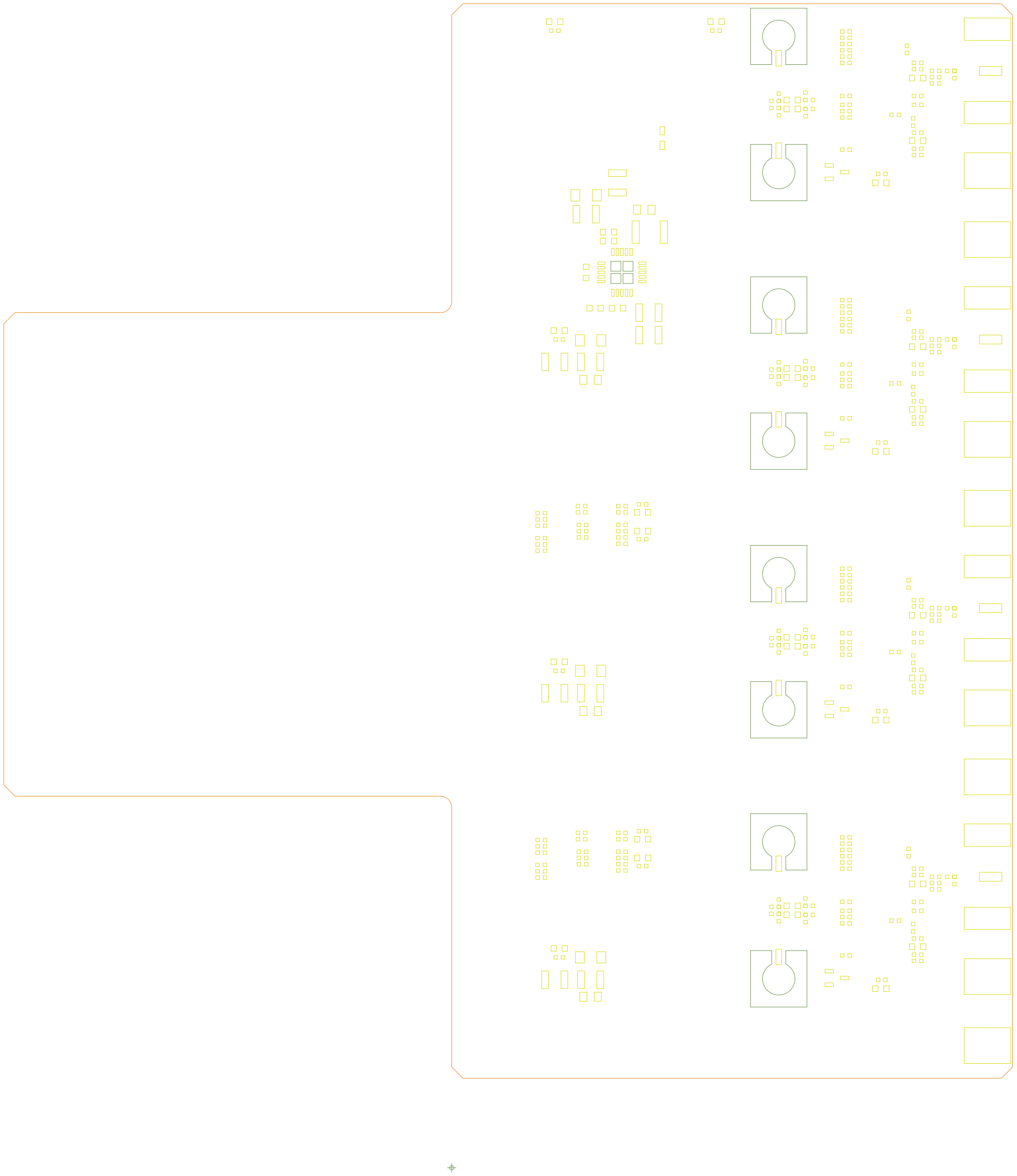
ENGINEER:
J. NERGER

PCB DESIGNER:
M. THREET

BOARD REV:
1.0

RELEASE DATE:
08/15/2014

SHEET NUMBER:
8 of 13



Krypton systems

CUSTOMER: TEXAS INSTRUMENTS

KSID: 15254

JOB NUMBER: 123933

BOARD NAME: TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION: **SOLDERPASTE TOP**

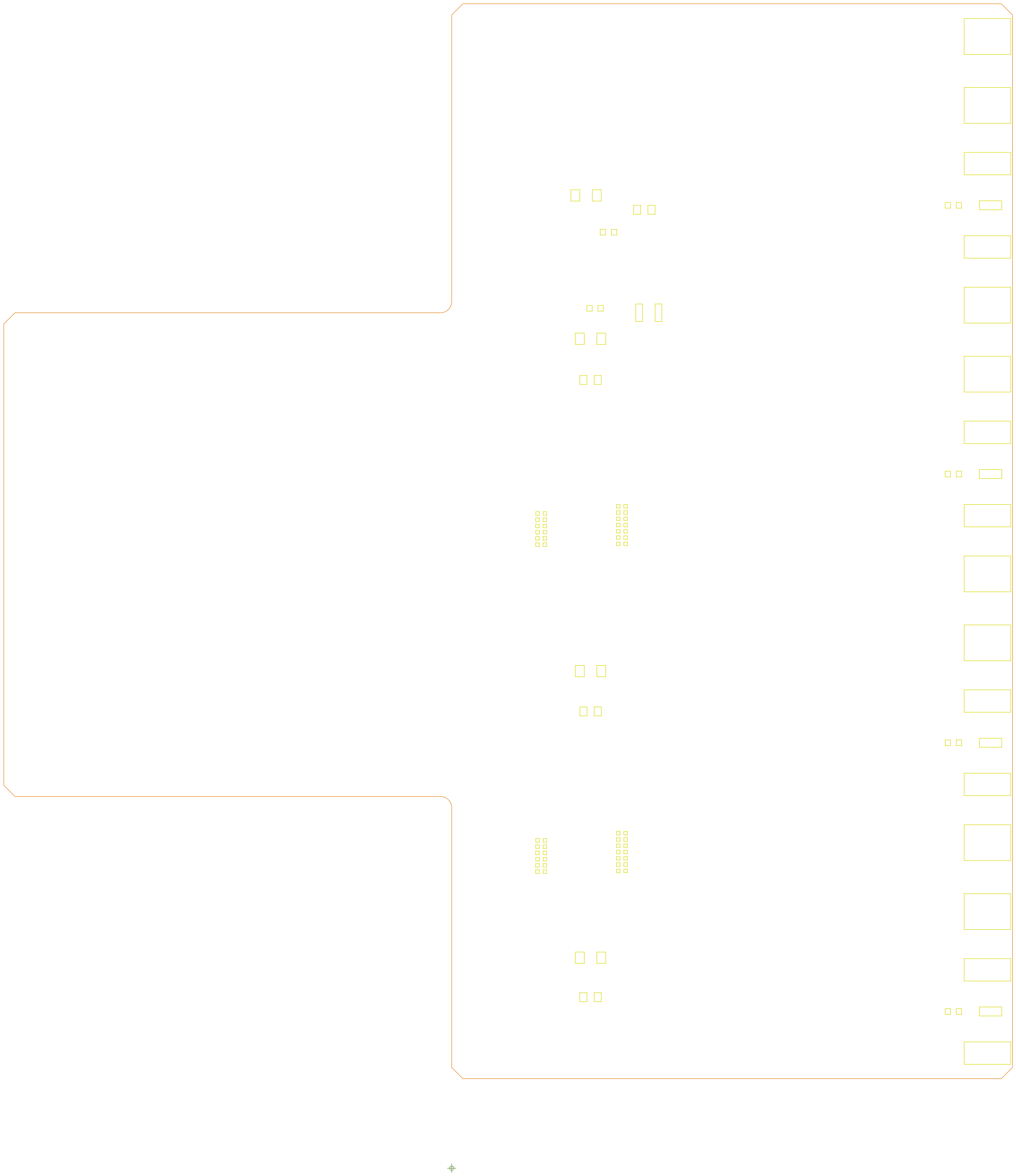
ENGINEER: J. NERGER

PCB DESIGNER: M. THREET

BOARD REV: 1.0

RELEASE DATE: 08/15/2014

SHEET NUMBER: **11** of 13



CUSTOMER:
TEXAS INSTRUMENTS

KSID:
15254

JOB NUMBER:
123933

BOARD NAME:
TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION:
SOLDERPASTE BOTTOM

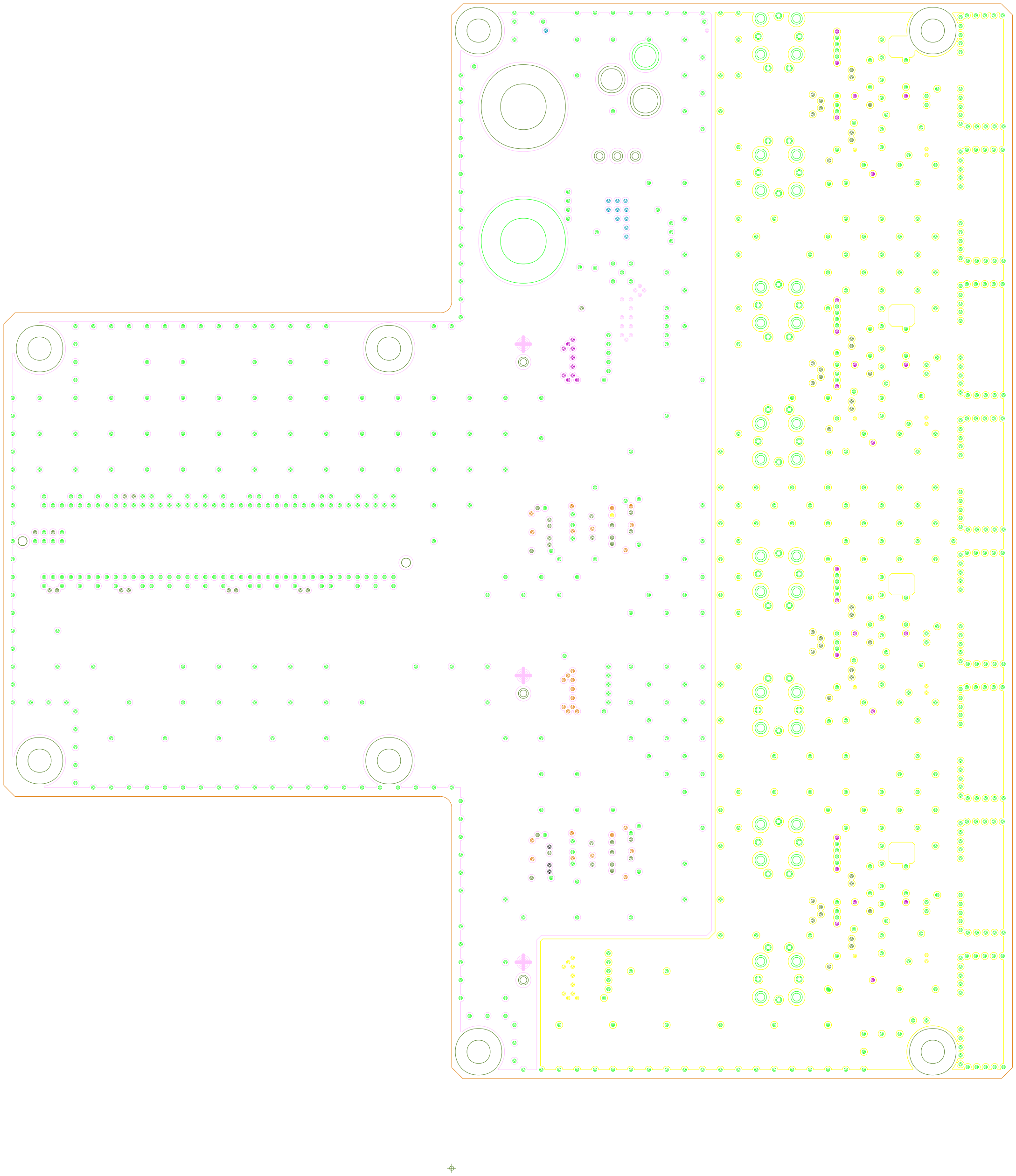
ENGINEER:
J. NERGER

PCB DESIGNER:
M. THREET

BOARD REV:
1.0

RELEASE DATE:
08/15/2014

SHEET NUMBER:
12 of 13



CUSTOMER:
TEXAS INSTRUMENTS

KSID:
15254

JOB NUMBER:
123933

BOARD NAME:
TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION:
GND3, LAYER 4

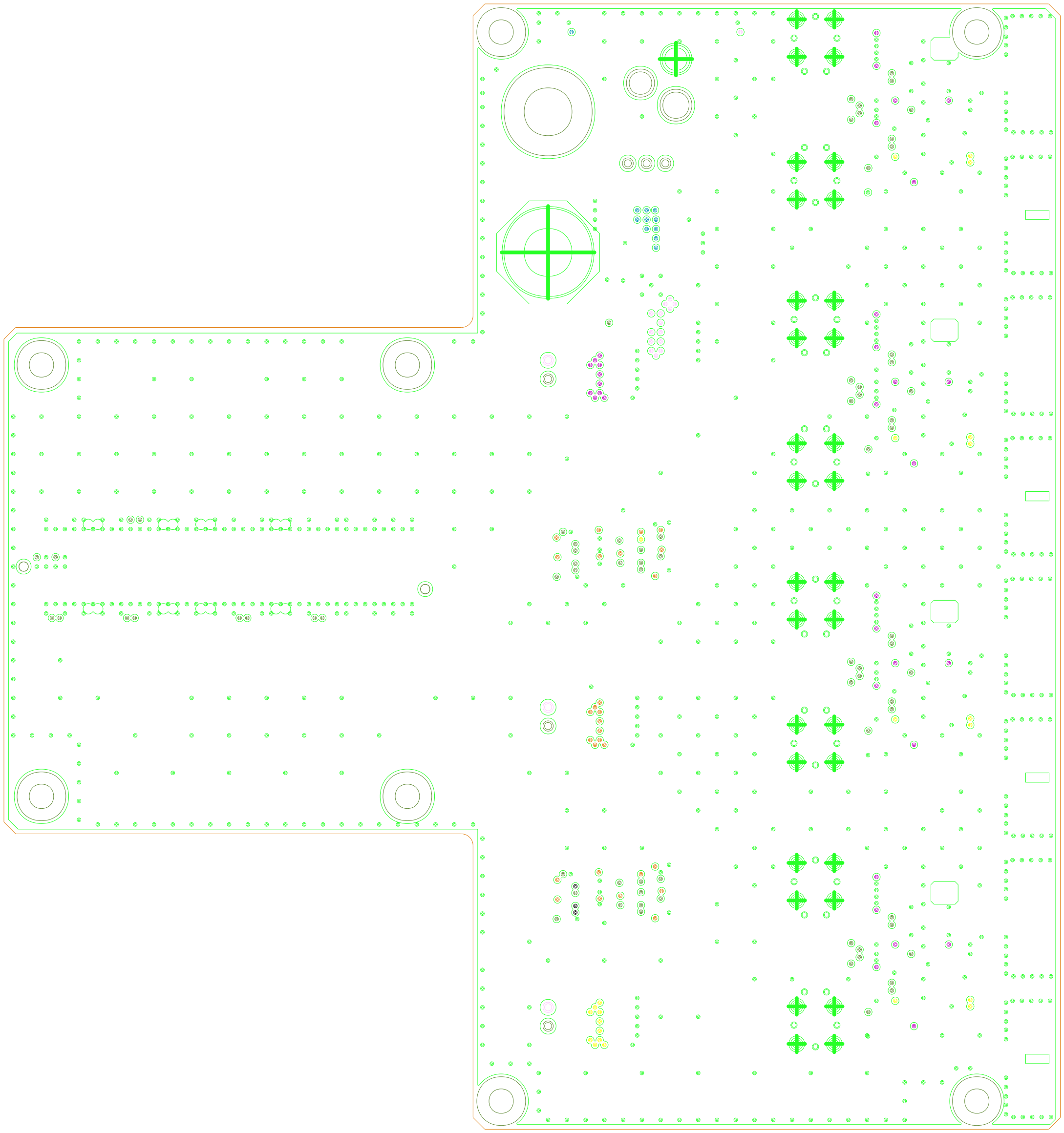
ENGINEER:
J. NERGER

PCB DESIGNER:
M. THREET

BOARD REV:
1.0

RELEASE DATE:
08/15/2014

SHEET NUMBER:
4 of 13



Krypton systems

CUSTOMER: TEXAS INSTRUMENTS

KSID: 15254

JOB NUMBER: 123933

BOARD NAME: TLK10XXX HD-SDI DAUGHTER BOARD

LAYER DESCRIPTION: **GND4, LAYER 5**

ENGINEER: J. NERGER

PCB DESIGNER: M. THREET

BOARD REV: 1.0

RELEASE DATE: 08/15/2014

SHEET NUMBER: **5** of 13

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

FABRICATION NOTES (DIMENSIONS ARE IN INCHES AND [mm])

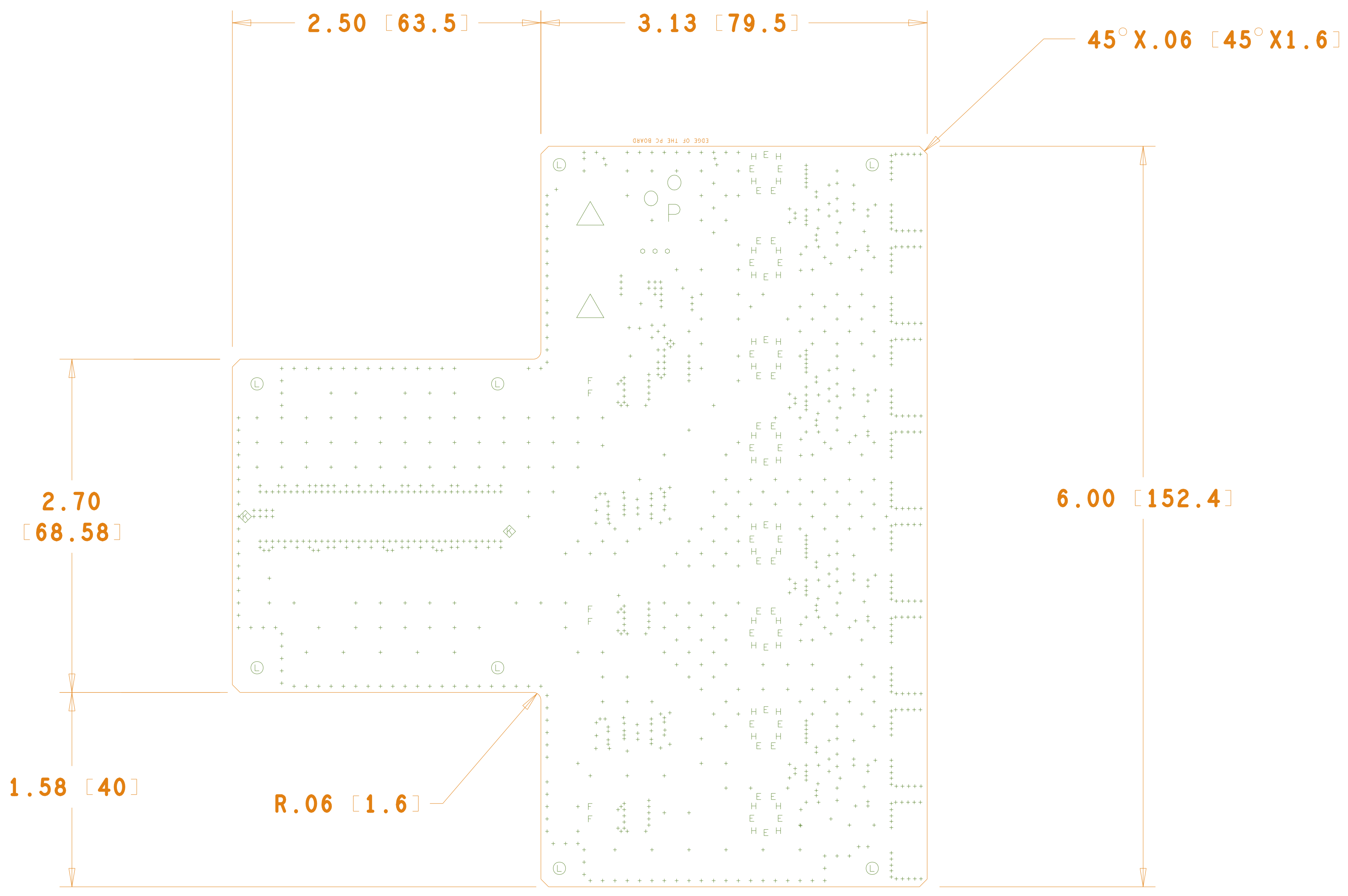
1: ALL FABRICATION ITEMS MUST MEET OR EXCEED BEST INDUSTRY PRACTICE IPC-A-600C (COMMERCIAL STANDARD).
2: LAMINATE MATERIAL: COPPER CLAD FR4 370 HR or EQUIVALENT.
3: COPPER WEIGHT: 1.0 OZ MIN OUTER LAYERS / 1.0 OZ INNER LAYERS.
4: FINISH BOARD THICKNESS: 0.064+/- .010 INCH.
5: POSITION ACCURACY: +/- .0015 INCH.
6: WARP AND TWIST NOT TO EXCEED .020/ INCH.
7: CONTROLLED IMPEDANCE LAYERS: SEE TABLE 1
8: LAYER COUNT:6
9: VIA PADS FOR ALL UNUSED INTERNAL SIGNAL LAYERS MAY BE REMOVED DURING BOARD MANUFACTURING.

PROCESS NOTES:

1: COPPER PLATING TO BE 0.001 INCH MINIMUM IN ALL PLATED THROUGH HOLES.
2: CIRCUITRY ON OUTER LAYERS TO BE ELECTROLESS NICKEL IMMERSION GOLD AND MEET OR EXCEED IPC-4552. 2 uIN MIN OF IMMERSION GOLD APPLIED OVER 120 - 240 uIN OF ELECTROLESS NICKEL.
3: SOLDERMASK BOTH SIDES, COLOR: BLUE.
4: APPLY WHITE LPI SILKSCREEN TO TOP AND BOTTOM SIDE OF BOARD USING SEPARATE ARTWORK.
5: THIS BOARD MUST BE RoHS COMPLIANT.
6. SAMPLE CROSS SECTION MUST BE PROVIDED BY VENDOR.
7: ALL 10 MIL HOLE VIA PADS SHALL BE TENTED (COVERED WITH SOLDER RESIST).

TRACE WIDTHS AND ROUTING:

1: TRACE WIDTH CALCULATIONS ARE STARTING VALUES. BOARD SHOP MAY ADJUST TRACE WIDTHS TO COMPENSATE FOR PROCESS.
2: DIELECTRIC CONSTANT:POLYCLAD 370 HR OR EQUIVALENT.



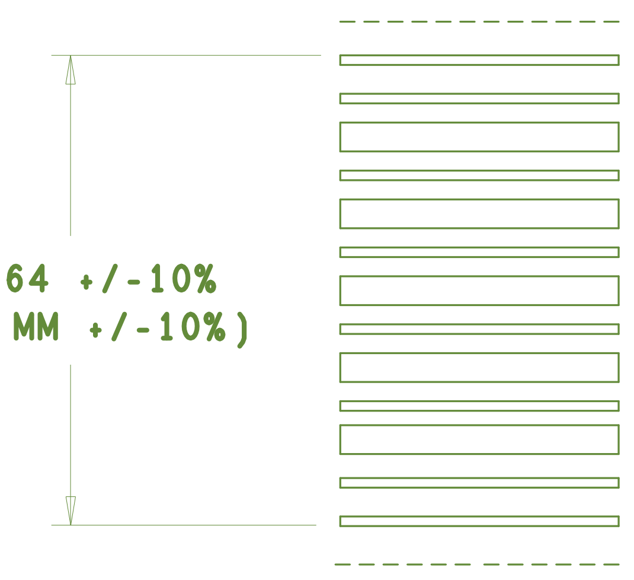
DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
+	10.0	+2.0/-2.0	PLATED	1057
E	24.0	+3.0/-3.0	PLATED	40
F	38.0	+3.0/-3.0	PLATED	6
⬡	38.0	+3.0/-3.0	PLATED	3
H	44.0	+3.0/-3.0	PLATED	32
○	120.0	+2.0/-2.0	PLATED	2
P	140.0	+0.0/-0.0	PLATED	1
△	255.0	+3.0/-3.0	PLATED	2
◈	50.0	+2.0/-2.0	NON-PLATED	2
Ⓛ	130.0	+2.0/-2.0	NON-PLATED	8

TABLE 1:
DIMENSIONS: INCHES

LAYER NO.	DIFFIRENTIAL PAIR IMPEDANCE (OHMS)	SINGLE ENDED TRACE WIDTH	DIFF TRACE WIDTH	DIFF TRACE SPACING
L1(TOP) L6(BOT)	100 +/- 10%		0.0055	0.006
L1(TOP) L6(BOT)	75 +/- 10%	0.004		
L1(TOP) L6(BOT)	50 +/- 10%	0.011		

krypton systems	CUSTOMER: TEXAS INSTRUMENTS		KSID: 15254	JOB NUMBER: 123933
	BOARD NAME: TLK10XXX HD-SDI DAUGHTER BOARD		LAYER DESCRIPTION: FABRICATION	
	ENGINEER: J. NERGER	PCB DESIGNER: M. THREET	BOARD REV: 1.0	RELEASE DATE: 08/15/2014	SHEET NUMBER: 13 of 13

LAYER STACK-UP



PRIMARY SIDE, SILK SCREEN	
PRIMARY SIDE, SOLDER MASK	
PRIMARY SIDE, LAYER 1	0.5 OZ (BEFORE PLATING)
DIELECTRIC	0.007''
INNER LAYER 2 GROUND PLANE	1 OZ
DIELECTRIC	0.006''
INNER LAYER 3 GROUND PLANE	1 OZ
DIELECTRIC	0.028''
INNER LAYER 4 GROUND PLANE	1 OZ
DIELECTRIC	0.006''
INNER LAYER 5 GROUND PLANE	1 OZ
DIELECTRIC	0.007''
SECONDARY SIDE, LAYER 6	0.5 OZ (BEFORE PLATING)
SECONDARY SIDE, SOLDER MASK	
SECONDARY SIDE, SILK SCREEN	

SIGNATURES	DATE
DRAWN	
CHECKED	
ENGRG	
ISSUED	

TEXAS INSTRUMENTS

FABRICATION DRAWING

TLK10XXX HD-SDI DAUGHTER BD

SIZE	FSCM NO	DWG NO	
		–	
SCALE NONE		SHEET	1 of 1

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