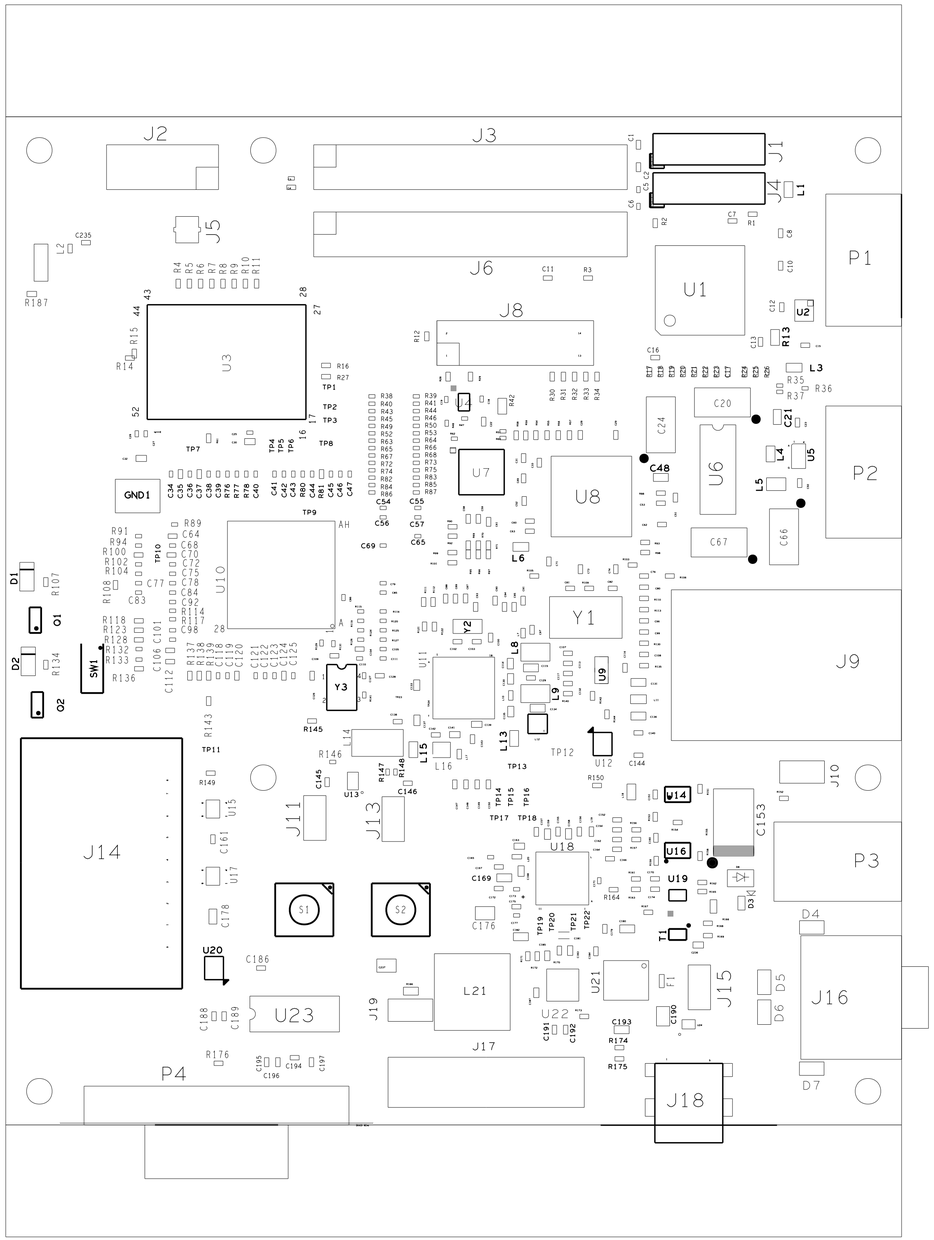
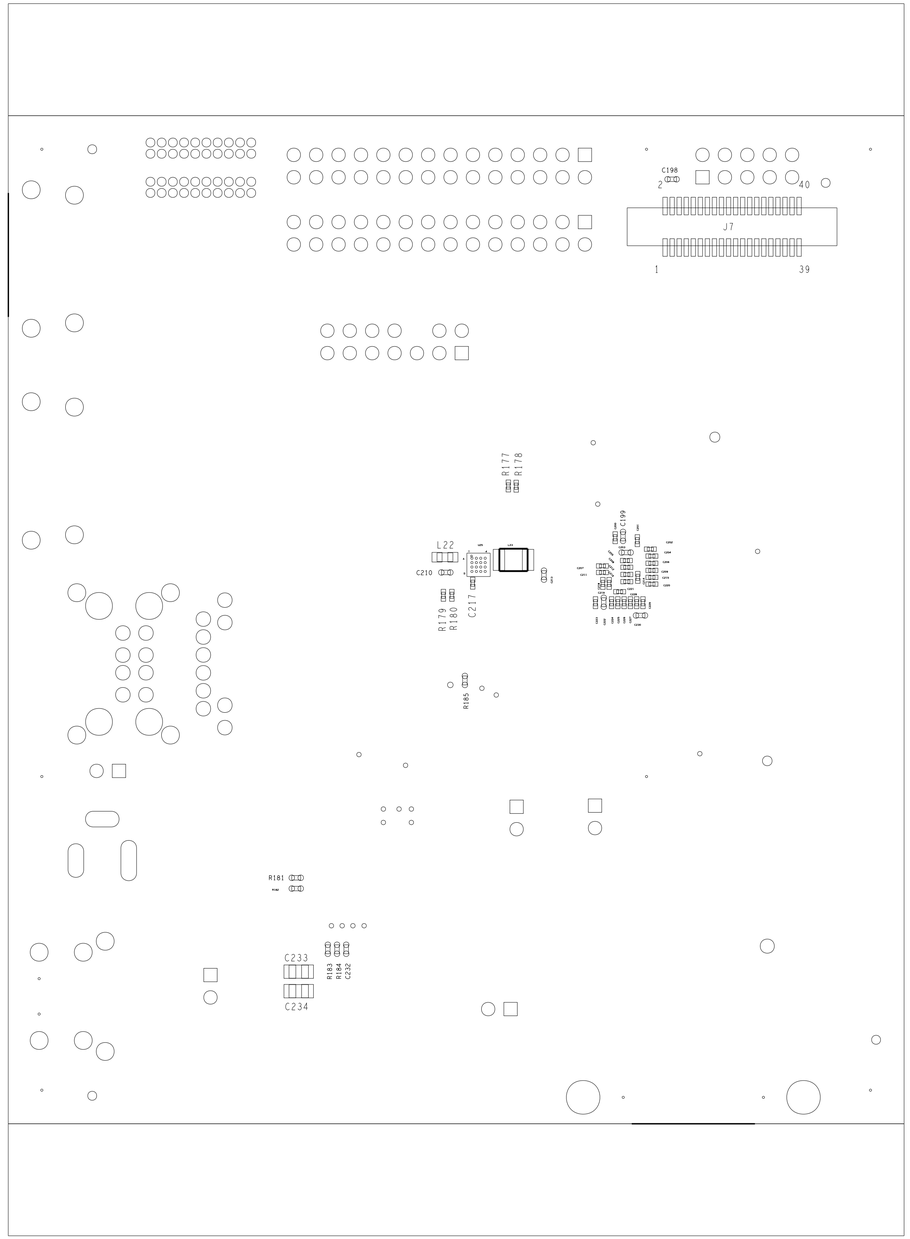
DESIGN LAYOUT DESIGNED WITH TI BY
QC GRAPHICS, INC. DALLAS, TEXAS



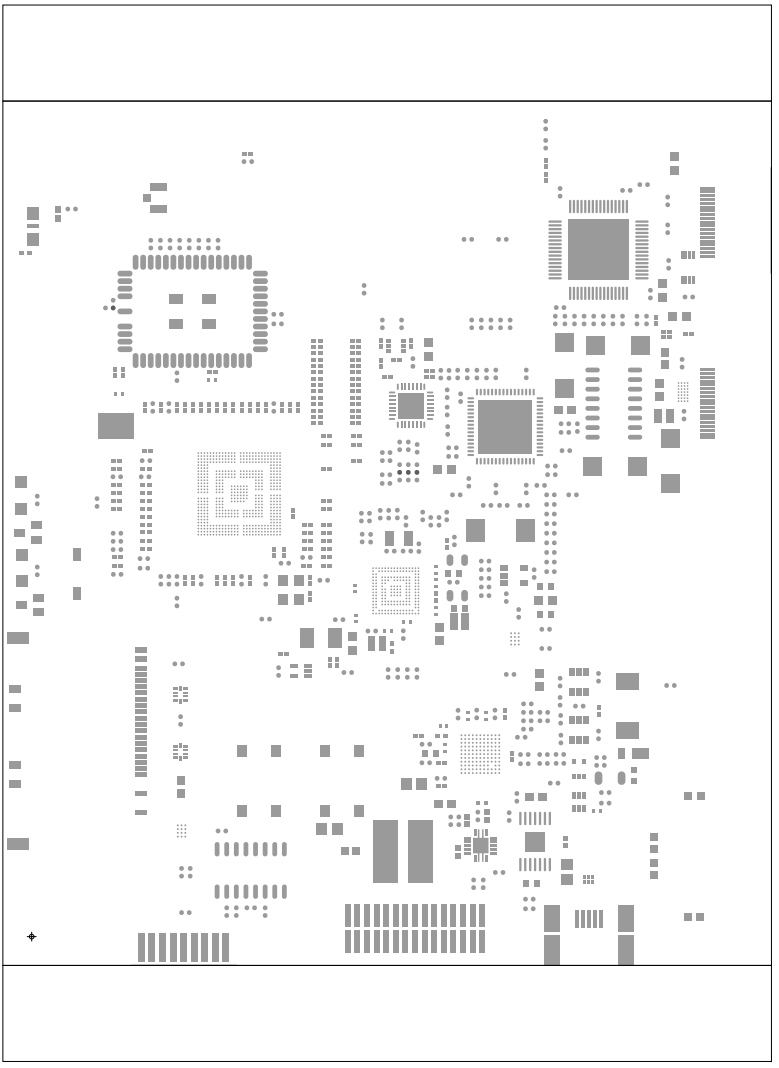
ASSEMBLY COMPONENT SIDE



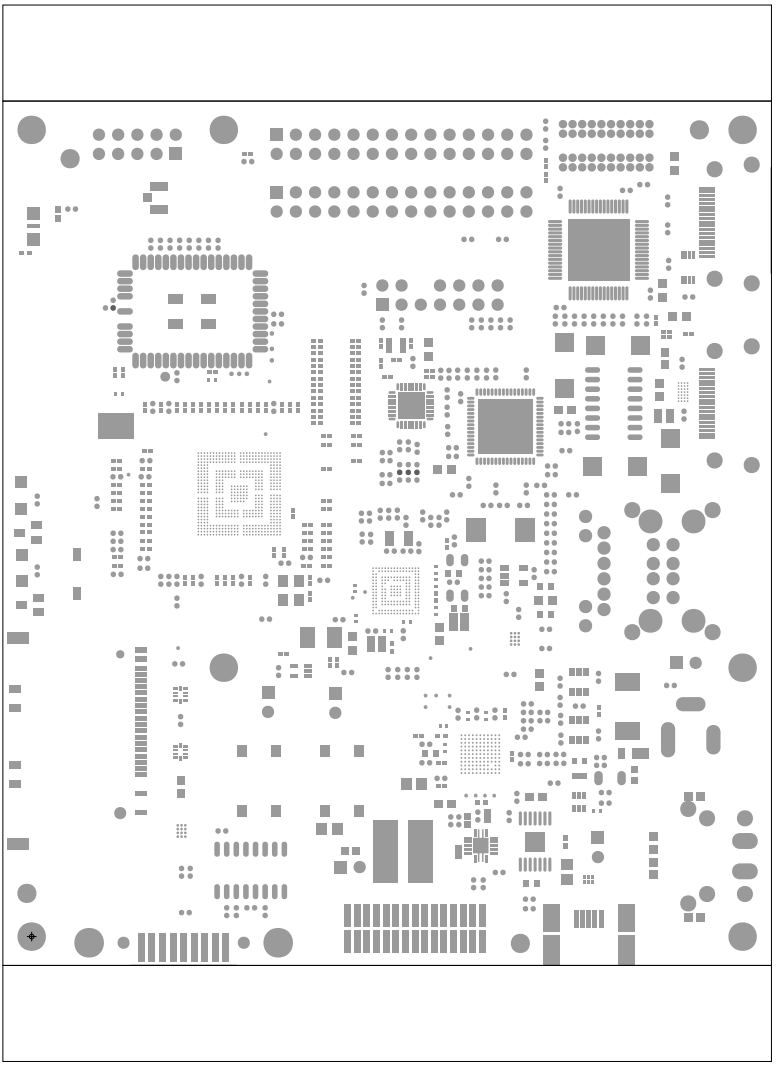
ASSEMBLY SOLDER SIDE

SEE BOM FOR NOT POPULATED PARTS

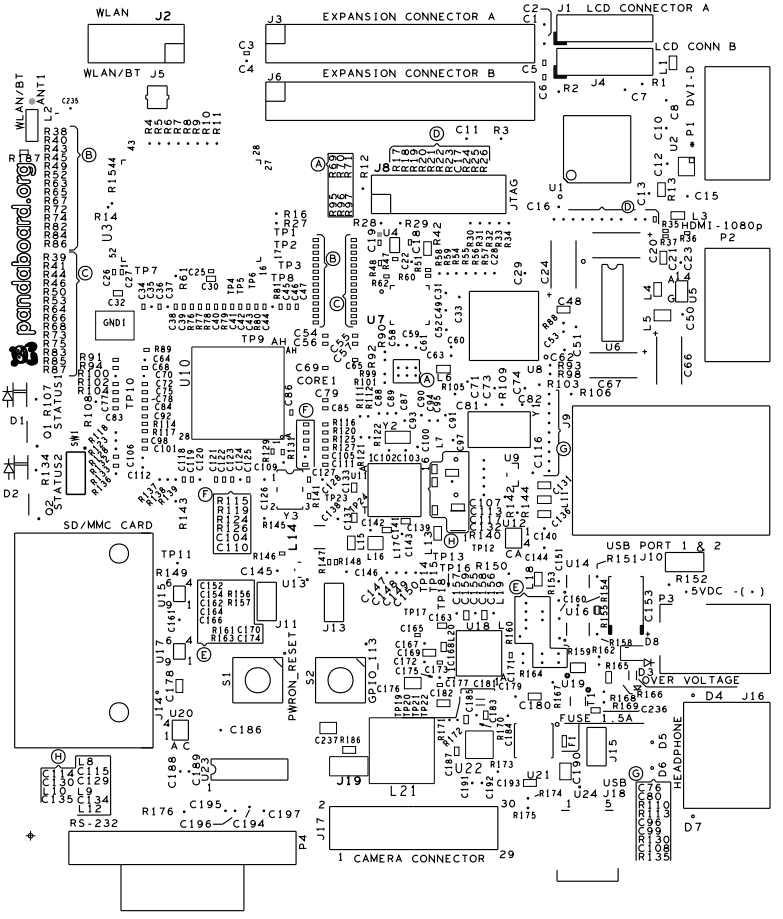
	APPROVED		pandaboard.org
	CHECKED		
	DRAFTING	S.Thomson	ASSEMBLY DRAWING,
DATE 08/31/11	ENGR		OMAP4460 uEVM PANDA
DESIGN ENGR	TOLERANCES UNLESS OTHERWISE SPECIFIED		
PROJECT ENGR	X.XX ± 0.01 X.XXX ± 0.005 ANGLES ± 1/2°		SCALE NONE
ENGR MGR		750-2170-004	SIZE D
NEXT ASSEMBLY	DO NOT SCALE DRAWING		SHEET 2 OF 2



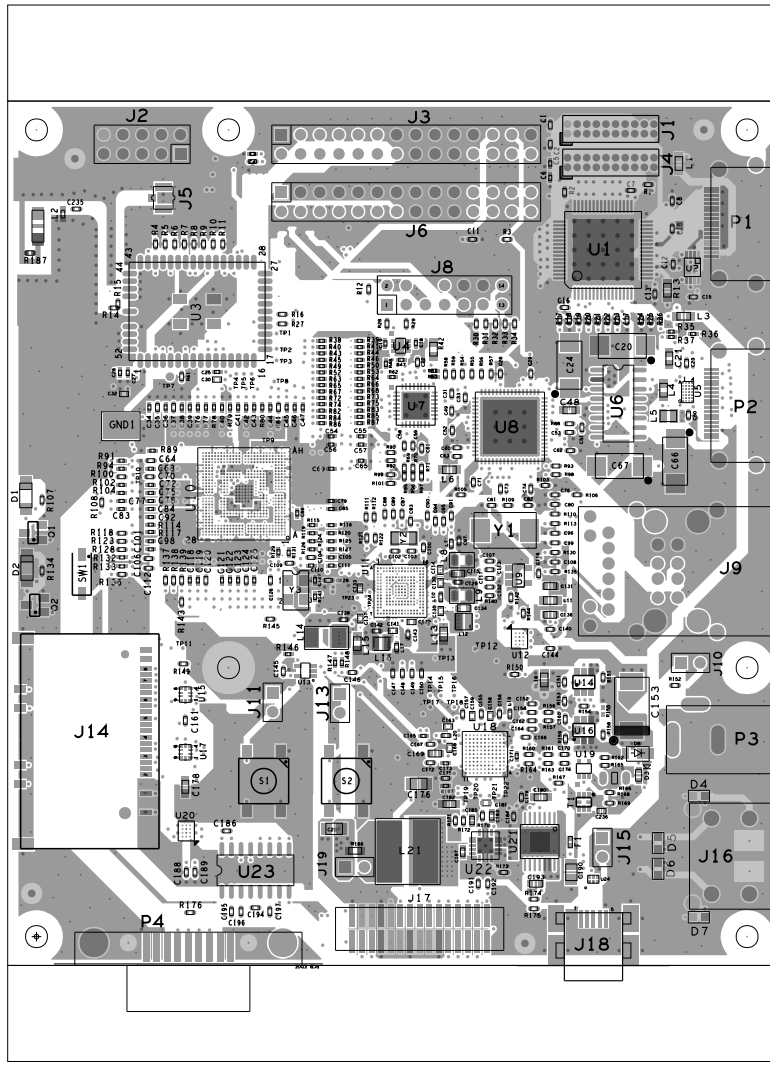
720-2170-004 Rev A LAYOUT DESIGN BY OC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org	
	SPC	OMAP4460 uEVM PANDA
	DATE: 08/31/11	



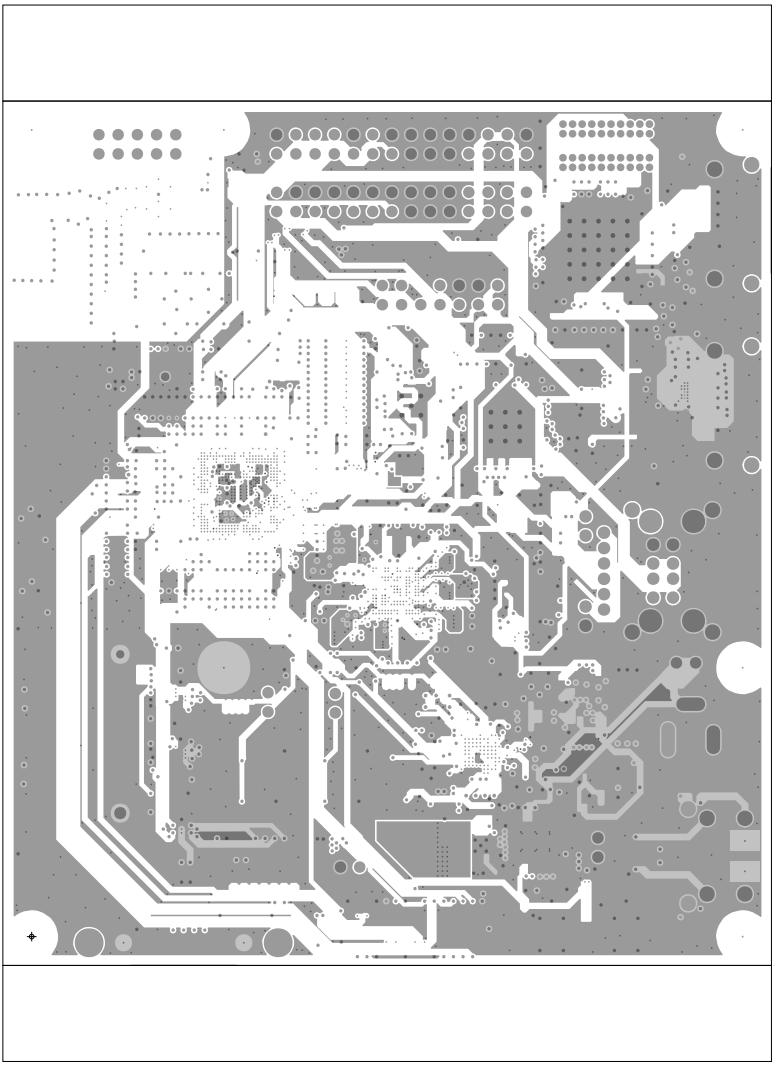
720-2170-004 Rev A LAYOUT DESIGN BY OC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org	
	SMC	OMAP4460 uEVM PANDA
	DATE: 08/31/11	



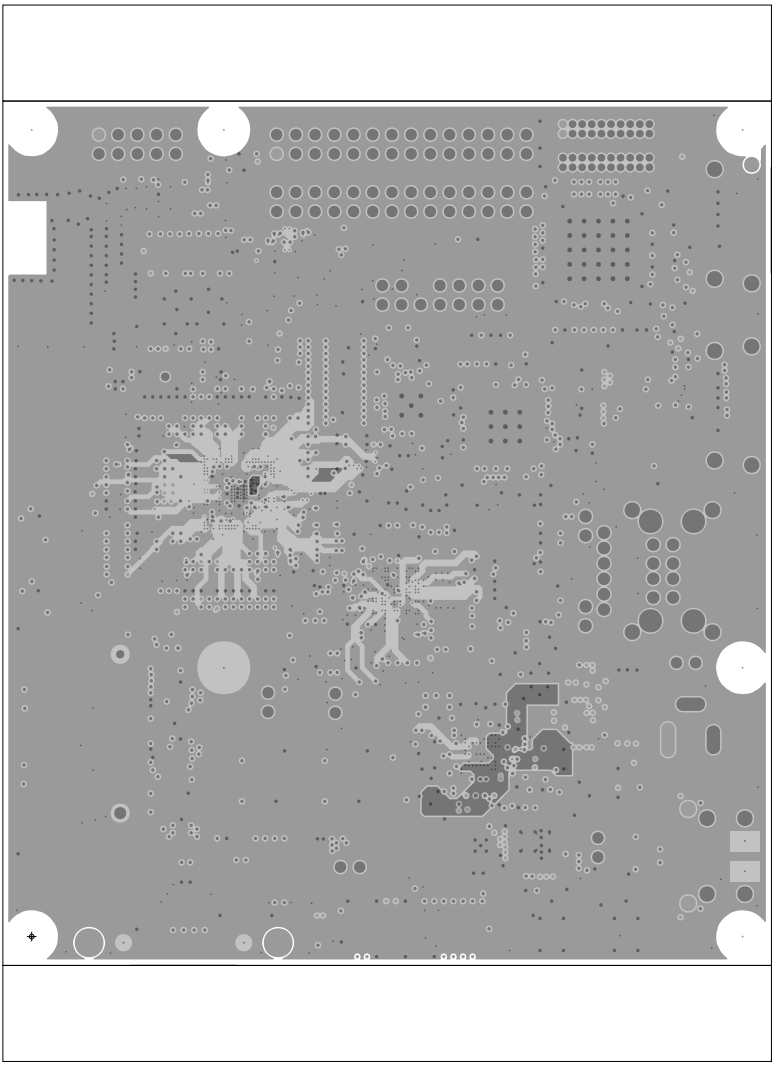
720-2170-004 Rev A LAYOUT DESIGN BY QC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org
	TSLK — OMAP4460 uEVM PANDA
	DATE: 08/31/11



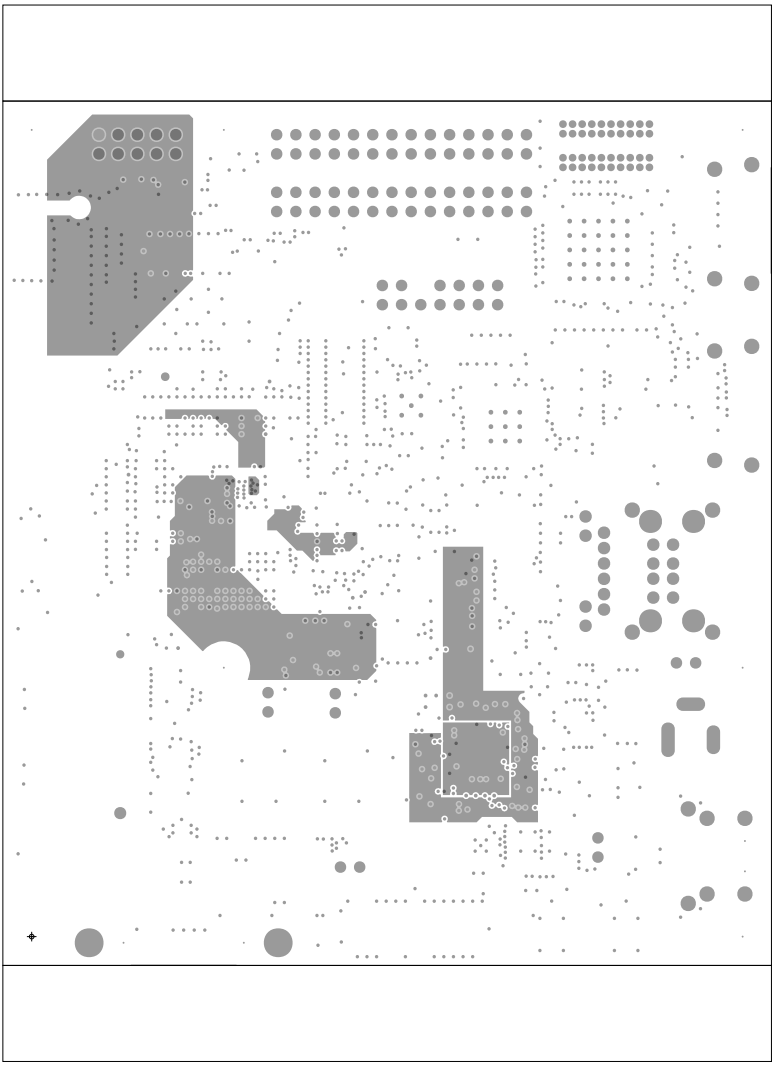
720-2170-004 Rev A LAYOUT DESIGN BY OC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org LAYER 1 COMPONENT | OMAP4460 uEVM PANDA DATE: 08/31/11



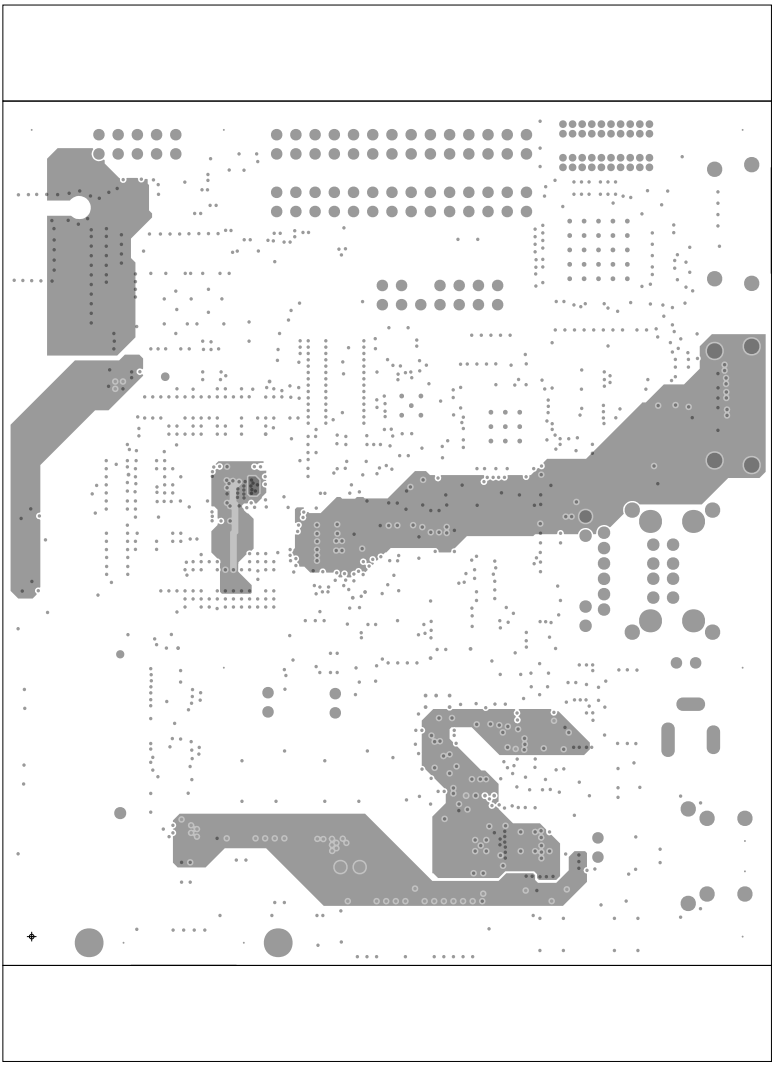
720-2170-004 Rev A LAYOUT DESIGN BY QC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org
	LAYER 2 SIGNAL — OMAP4460 uEVM PANDA
	DATE: 08/31/11



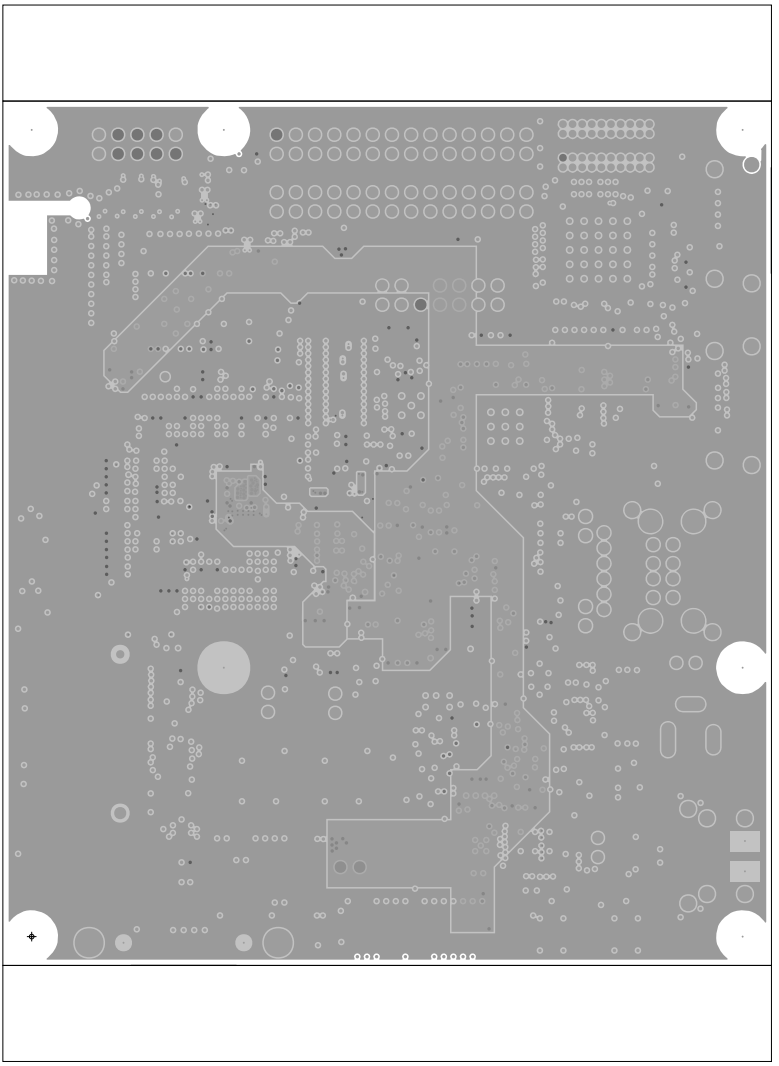
720-2170-004 Rev A LAYOUT DESIGN BY QC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org
	LAYER 3 GROUND
	OMAP4460 uEVM PANDA
	DATE: 08/31/11



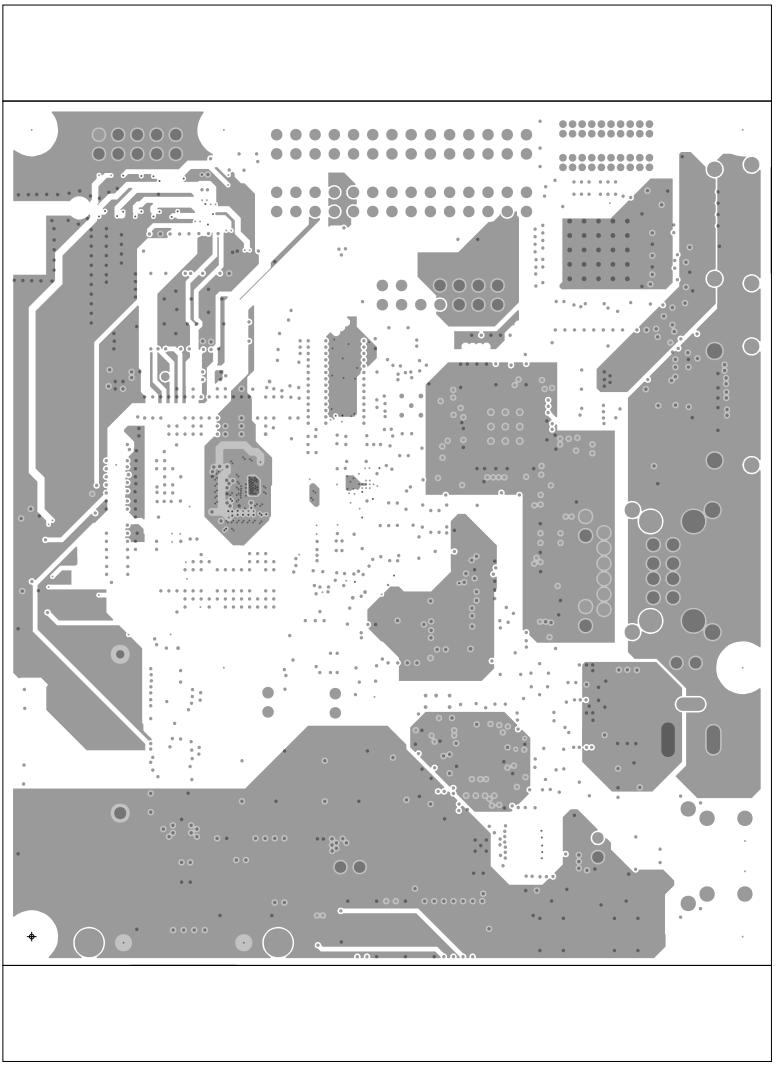
720-2170-004 Rev A LAYOUT DESIGN BY QC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org	
	LAYER 4 SIGNAL	OMAP4460 uEVM PANDA
	DATE: 08/31/11	



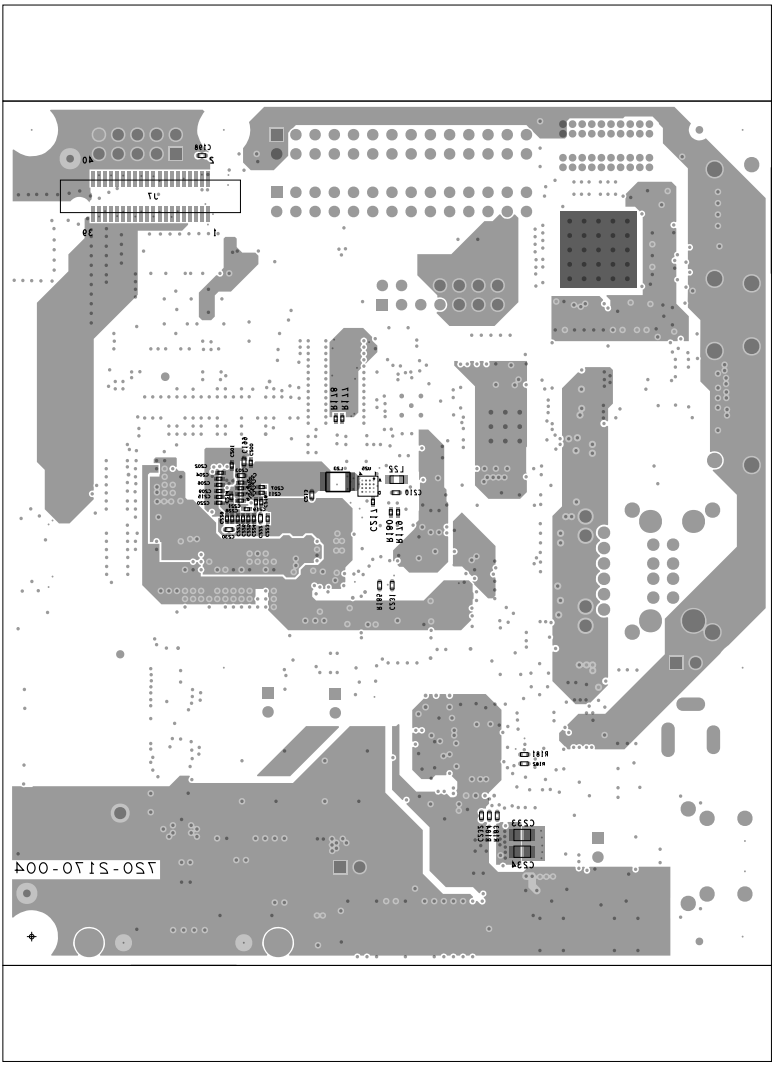
720-2170-004 Rev A LAYOUT DESIGN BY OC GRAPHICS. INC. DALLAS. TX 972-931-4100	pandaboard.org	
	LAYER 5 SIGNAL	OMAP4460 uEVM PANDA
	DATE: 08/31/11	



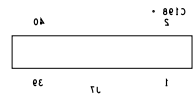
720-2170-004 Rev A LAYOUT DESIGN BY QC GRAPHICS. INC. DALLAS. TX 972-931-4100	pandaboard.org
	LAYER 6 POWER — OMAP4460 uEVM PANDA
	DATE: 08/31/11

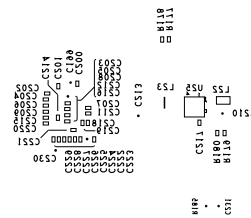


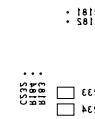
720-2170-004 Rev A LAYOUT DESIGN BY QC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org
	LAYER 7 SIGNAL — OMAP4460 uEVM PANDA
	DATE: 08/31/11



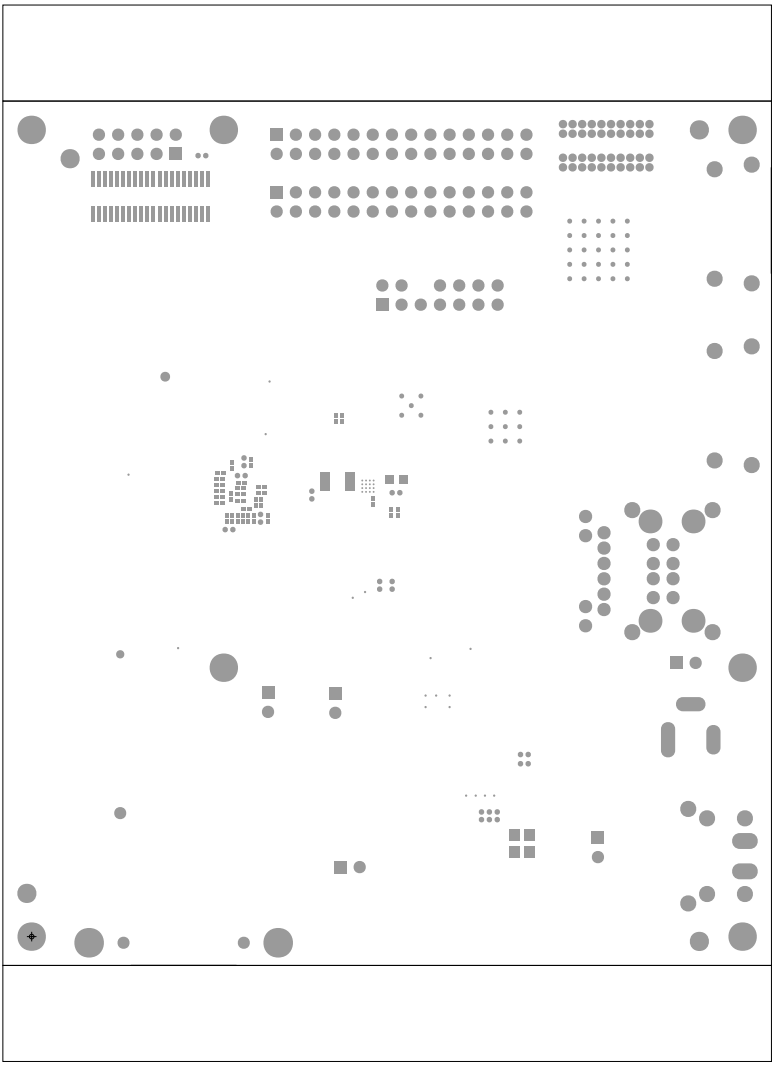
720-2170-004 Rev A LAYOUT DESIGN BY QC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org LAYER 8 SOLDER | OMAP4460 uEVM PANDA DATE: 08/31/11



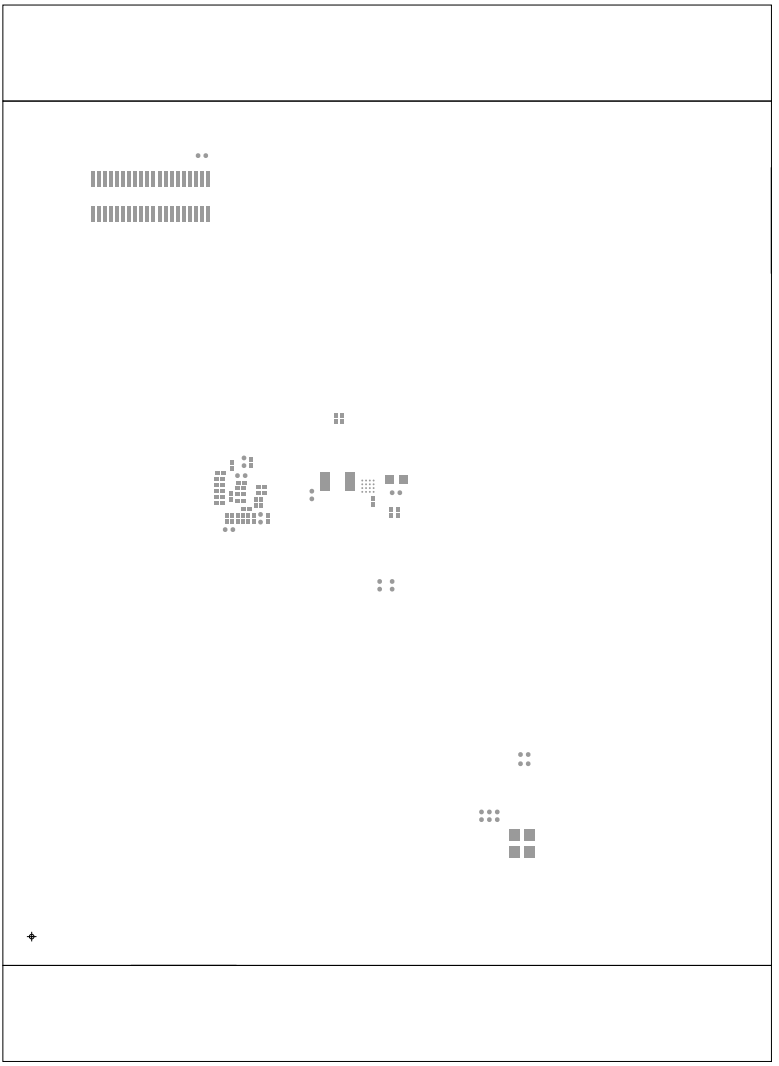




720-2170-004 Rev A LAYOUT DESIGN BY QC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org BSLK | OMAP4460 uEVM PANDA DATE: 08/31/11



720-2170-004 Rev A LAYOUT DESIGN BY QC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org
	SMS / OMAP4460 uEVM PANDA
	DATE: 08/31/11

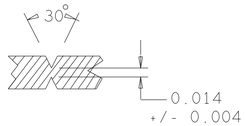


720-2170-004 Rev A LAYOUT DESIGN BY QC GRAPHICS, INC. DALLAS, TX 972-931-4100	pandaboard.org	
	SPS	OMAP4460 uEVM PANDA
	DATE: 08/31/11	

DRILL CHART: TOP to LYR2-SIG ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
	4.0	+2.0/-4.0	PLATED	882

DRILL CHART: TOP to LY3-GND ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
	4.0	+2.0/-4.0	PLATED	353

DRILL CHART: LYR2-SIG to LY3-GND ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
	4.0	+2.0/-4.0	PLATED	225

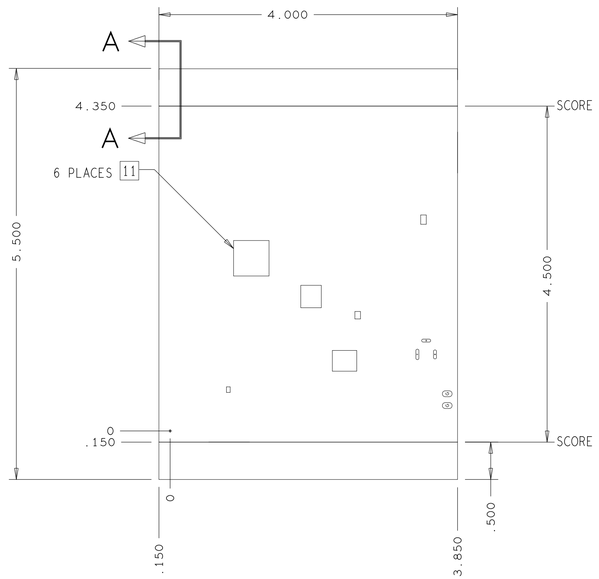


VIEW A - A
SCALE: NONE

DRILL CHART: LY3-GND to LYR6-PWR ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
	8.0	+2.0/-8.0	PLATED	128

DRILL CHART: LYR6-PWR to LYR7-SIG ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
	4.0	+2.0/-4.0	PLATED	115

DRILL CHART: LYR7-SIG to BOTTOM ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
	4.0	+2.0/-4.0	PLATED	168



DRILL CHART: TOP to BOTTOM ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
	8.0	+2.0/-8.0	PLATED	1117
	10.0	+3.0/-10.0	PLATED	17
	12.0	+3.0/-3.0	PLATED	39
	25.0	+3.0/-3.0	PLATED	1
	28.0	+3.0/-3.0	PLATED	40
	40.0	+3.0/-3.0	PLATED	107
	51.0	+3.0/-3.0	PLATED	8
	60.0	+3.0/-3.0	PLATED	6
	62.0	+3.0/-3.0	PLATED	4
	90.0	+3.0/-3.0	PLATED	4
	120.0	+3.0/-3.0	PLATED	2
	43.3	+2.0/-2.0	NON-PLATED	1
	59.0	+2.0/-2.0	NON-PLATED	2
	63.0	+2.0/-2.0	NON-PLATED	1
	144.0	+2.0/-2.0	NON-PLATED	7
⊡	120.0x40.0	+3.0/-3.0	PLATED	1
⊡	120.0x40.0	+3.0/-3.0	PLATED	1
⊡	140.0x40.0	+3.0/-3.0	PLATED	1
◎	130.0x79.0	+2.0/-2.0	NON-PLATED	2

12. BOARD LAYOUT DESIGNED WITH TI BY QC GRAPHICS, INC. DALLAS, TEXAS
11. REGISTRATION OF SOLDERMASK SHALL BE +/- .002.
10. IMPEDENCE CONTROL TO XX OHMS. SEE TABLE WITH IMPEDANCE REQUIREMENTS DETAIL B
9. SURFACE FINISH SHALL BE IMMERSION SILVER
8. FINISHED BOARD SHALL BE FREE OF BURRS ON EDGES.
7. DRC'S MUST BE RUN ON THE GERBERS BEFORE BUILDING BOARDS UNLESS PRIOR APPROVAL IS GIVEN IN WRITING.
6. VENDOR TO CLIP SILKSCREEN FROM EXPOSED COPPER/PADS.
5. PLATED THRU HOLE SIZE TOLERANCES SHALL BE +/- .003 INCH. UNPLATED THRU HOLE SIZE TOLERANCES SHALL BE +/- .002 INCH.
4. SOLDERMASK ON BOTH SIDES OF THE BOARD SHALL BE S.M.O.B.C., LPI, COLOR BLACK.
3. MINIMUM TRACE AND SPACE SHALL BE .003 OF AN INCH.
2. LAYER STACKUP AND COPPER WEIGHTS ARE PER 720-2170-002_STACKUP.PDF. AVERAGE COPPER ON THE WALL OF THE PLATED THRU HOLE SHALL BE PER IPC CLASS 2.
1 TOTAL BOARD THICKNESS SHALL BE .062 +/- 10% INCHES. ALL MATERIAL SHALL BE NEMA GRADE FR-4 OR EQUIVALENT. (Tg>=170 DEG. C) BOARD FABIRCATION SHALL BE PER IPC CLASS 2.

NOTES: UNLESS OTHERWISE SPECIFIED

DETAIL B
IMPEDANCE REQUIREMENTS

Layers	Single Ended		Single Ended		Differential					
	Trace Width (Mils)	Impedance (Ohms)	Trace Width (Mils)	Impedance (Ohms)	Trace Width (Mils)	Trace Pitch center-center (Mils)	Impedance (Ohms)	Trace Width (Mils)	Trace Pitch center-center (Mils)	Impedance (Ohms)
L1_PS	12	50 (REF.PLN.3)			6.50	10.5	90 (REF.PLN.3)	5.50	10.50	100 (REF.PLN.3)
L2_SIG	4.50	50 (REF.PLN.3)			3.75	8	90 (REF.PLN.3)	3	8	100 (REF.PLN.3)
L3_GND								5.75	10	100 (REF.PLN.3)
L4_SIG	9	50 (REF.PLN.3)			6.50	11.5	90 (REF.PLN.3)	5	10	100 (REF.PLN.3)
L5_SIG	9	50 (REF.PLN.4)								
L6_PWR										
L7_SIG	4.50	50 (REF.PLN.4)								
L8_SS	12	50 (REF.PLN.4)						5.50	10.50	100 (REF.PLN.4)

DRILL LAYER 1-8

LAYER SCHEDULE

SCALE: NONE

TSLK
SMC
LAYER 1
LAYER 2
LAYER 3
LAYER 4
LAYER 5
LAYER 6
LAYER 7
LAYER 8
SMS
BSLK

APPROVED		pandaboard.org
CHECKED		
DRAFTING	S.Thomson	FABRICATION DRAWING, OMAP4460 uEVM PANDA
ENGR		
DATE 08/31/11	TOLERANCES UNLESS OTHERWISE SPECIFIED	SCALE NONE
DESIGN ENGR		SHEET 1 OF 1
PROJECT ENGR	x.xx ± 0.01 x.xxx ± 0.005 ANGLES ± 1/2°	720-2170-004 SIZE D
ENGR MGR		
NEXT ASSEMBLY	DO NOT SCALE DRAWING	