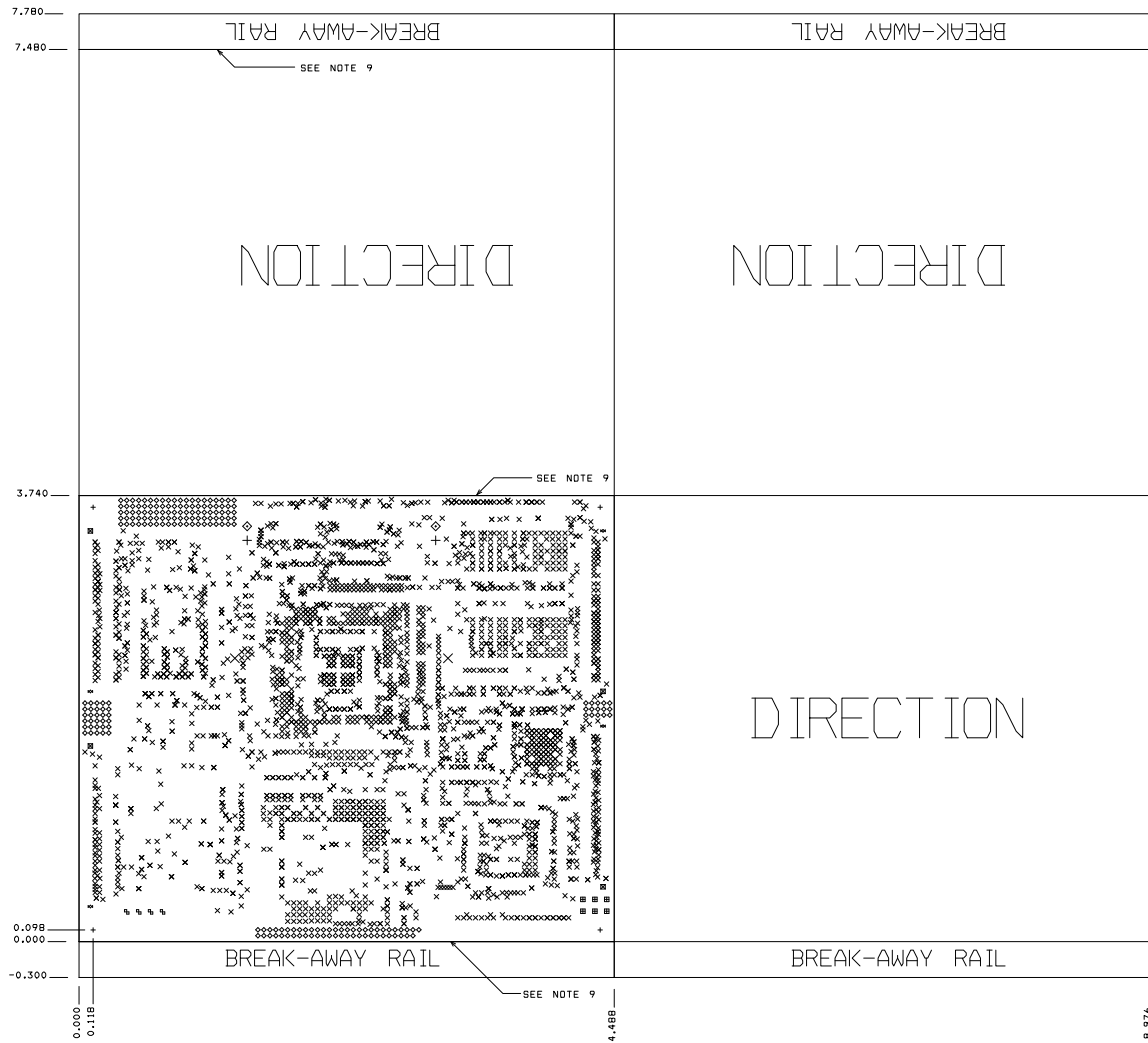


LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
000714 REV B
5-51-07

LAYER 10 CIRCUIT BOTTOM SIDE

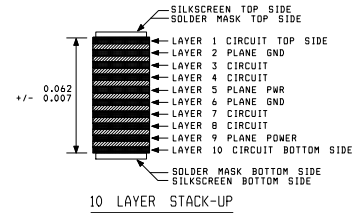


REVISION CHANGES

PART NO.	REV.	DATE	CHANGES
1003744	A	12-27-2006	--
1007114	A	3-12-2007	SEE BELOW
1007114	B	5-31-2007	SEE 4, BELOW

- REPLACE R320 WITH R376, R377, & R378
- CHANGE FINISH FROM GOLD TO SILVER
- CHANGE MOUNT HOLES TO NON PLATED
- CHANGED U2 LAND PADS TO .020 INCH DIA

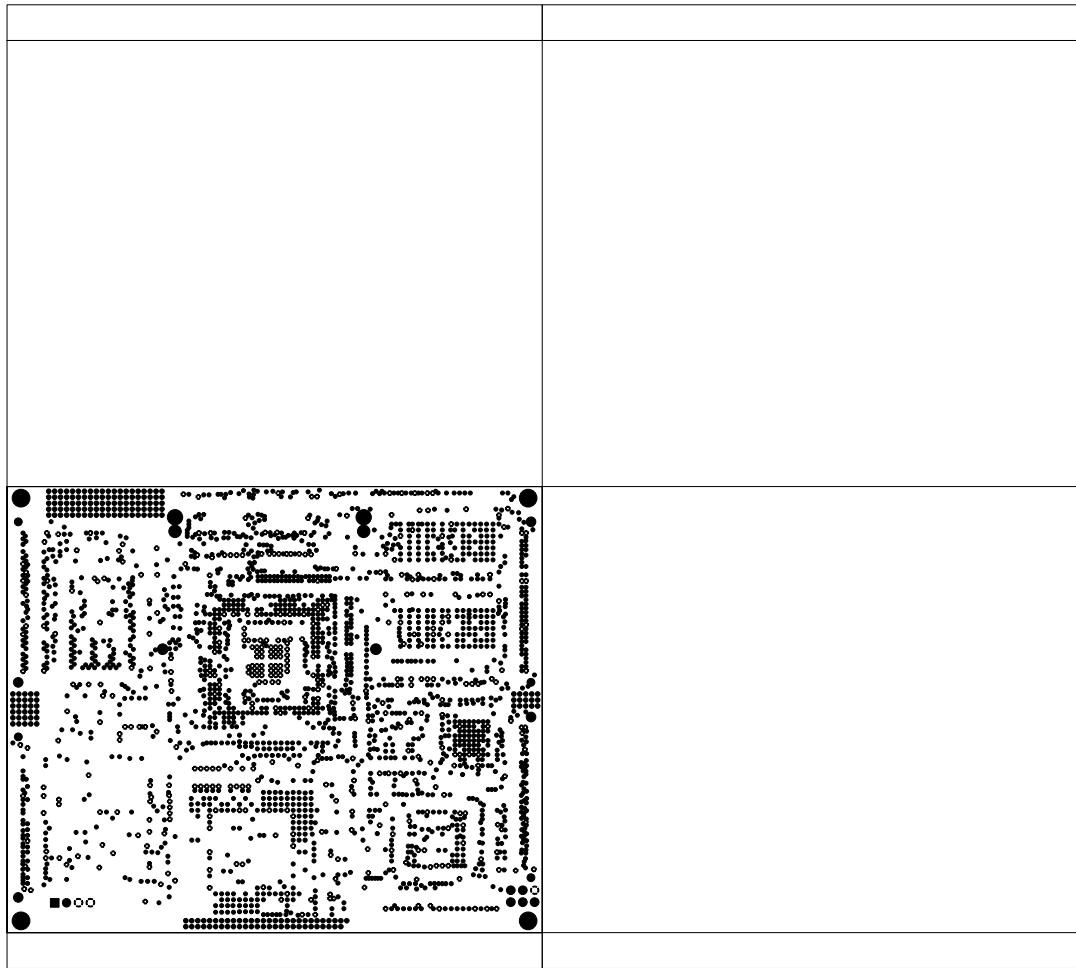
- NOTE:
- MATERIAL SELECTION:
 - LAYER. EPOXY GLASS, NEMA GRADE FR-4, 0.062 +/- 0.007 THICK. 0.5 OZ. MINIMUM COPPER CLADDING WITH SMOBC.
 - FINISH ON ALL SOLDERABLE SURFACES TO BE:
 - IMMERSION SILVER (1mg)
 - OSP - ENTEK PLUS 106A.
 - WHITE TIN.
 - SOLDER RESIST: THE USE OF SOLDER RESIST COATING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF IPC-SM-840. ALL SOLDERABLE SURFACES ARE TO BE FREE OF SOLDER RESIST. COLOR - BLUE. USE LIQUID PHOTODURABLE RESIST.
 - SILKSCREEN: USE WHITE NON-CONDUCTIVE INK. ALL COMPONENT AND TESTPOINT LANDS ARE TO BE FREE OF INK.
 - MANUFACTURER'S IDENTIFICATION: ADD TO SILKSCREEN ON BOTTOM SIDE.
 - ELECTRICAL BARE BOARD TEST REQUIRED.
 - DRILL SIZES ARE FINISHED SIZE AFTER PLATING.
 - BOARD TO BE BUILT AS A 4X ARRAY.
 - BOARD TO BE SCORED AT DESIGNATED LINE. SCORING TO BE 45 DEG. AND A MINIMUM OF 0.015 INCHES BOARD MATERIAL IN CHANNEL.
 - BOARD TO BE IMPEDANCE CONTROLLED. IMPEDANCE TO BE CALCULATED AT 50 OHMS +/- 10%, .005 LINE WIDTH. SEE PANEL ARTWORK.
 - THE PRINTED CIRCUIT BOARDS MANUFACTURED TO THIS DRAWING MUST BE RoHS COMPLIANT



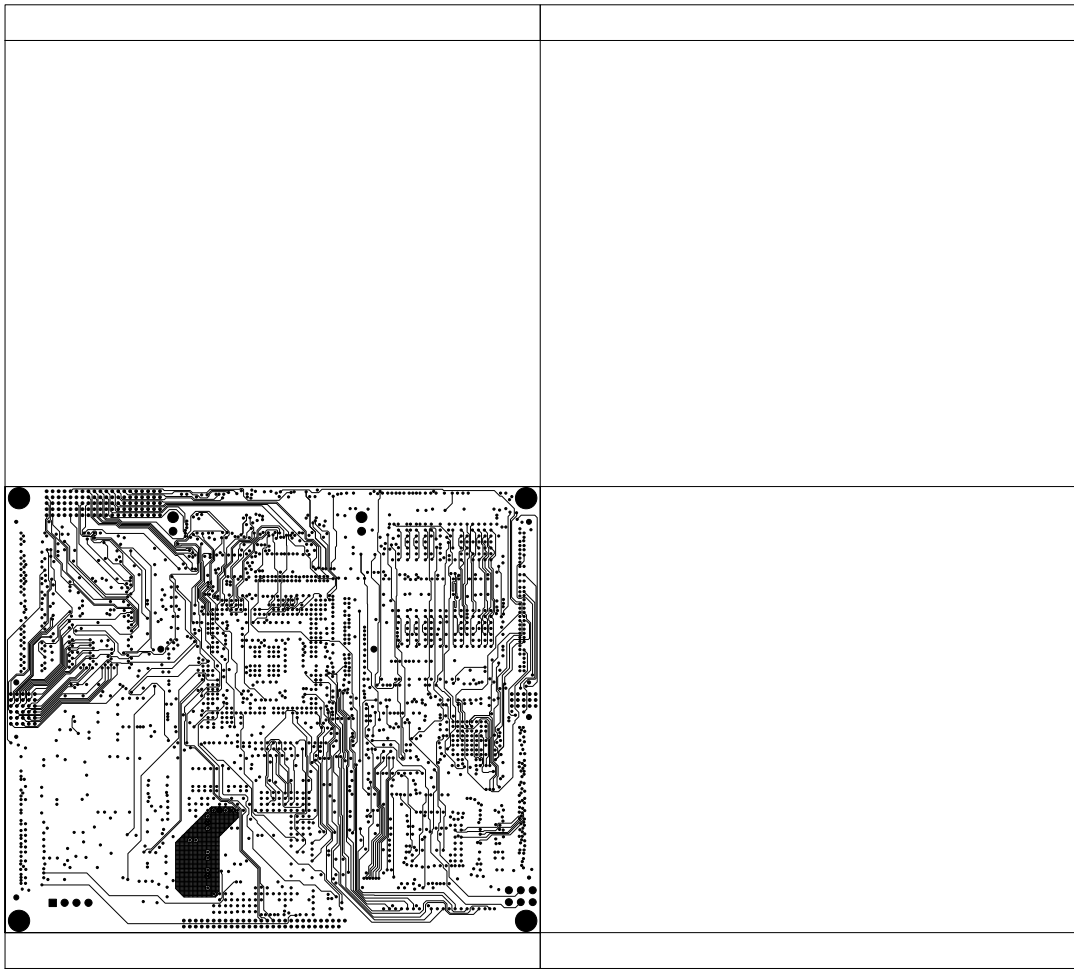
DRILL CHART

SYM	DIAM	TOL	QTY	NOTE
x	0.010	+/- .003	2486	PLATED
o	0.012	+/- .003	200	PLATED
■	0.028	+/- .003	4	NON-PLATED
■	0.040	+/- .003	6	PLATED
■	0.042	+/- .003	4	PLATED
■	0.043	+/- .003	4	NON-PLATED
×	0.051	+/- .003	2	NON-PLATED
+	0.067	+/- .003	2	NON-PLATED
◇	0.091	+/- .003	2	NON-PLATED
+	0.098		4	NON-PLATED
TOTAL			2714	

PANEL DRAWING

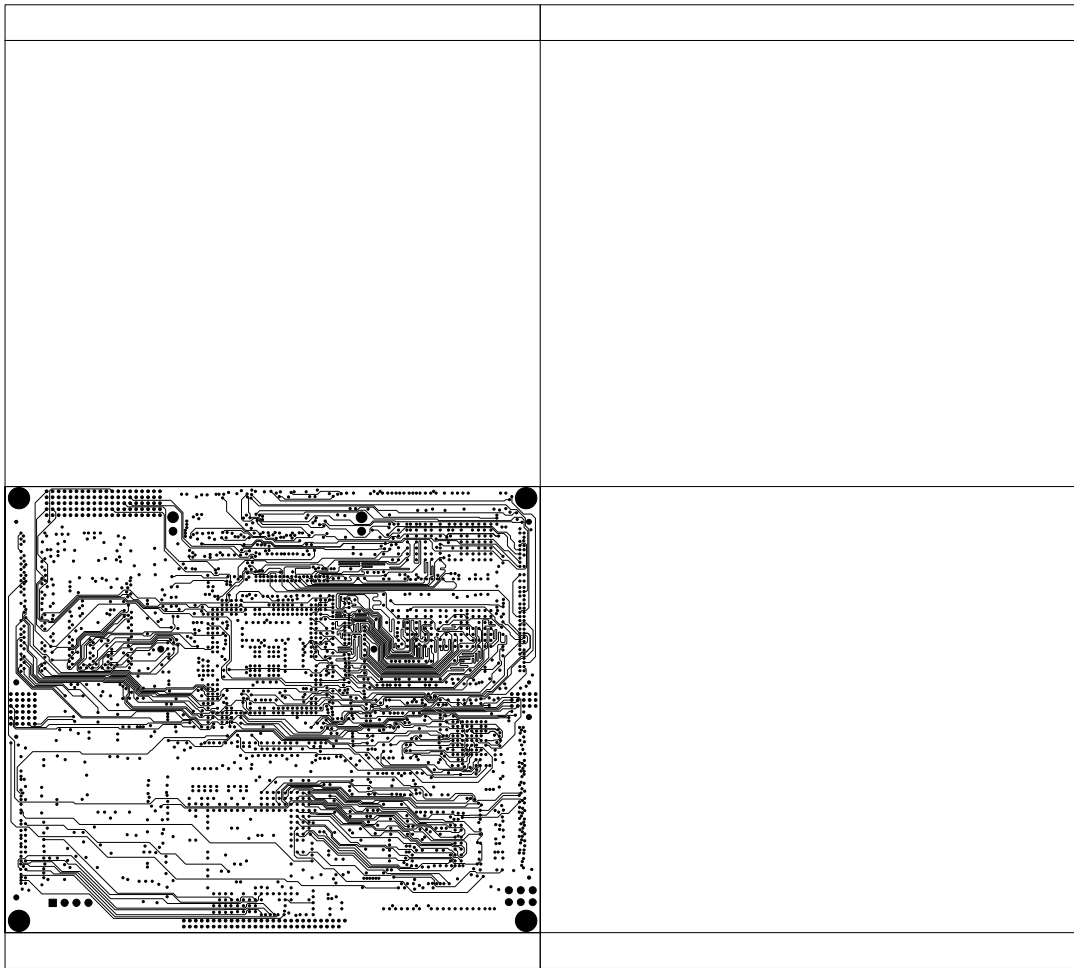


LOGIC PRODUCT DEVELOPMENT
NCP544 FIRE ENGINE
000714 REV B
3-31-07
LAYER 2 PLANE DND



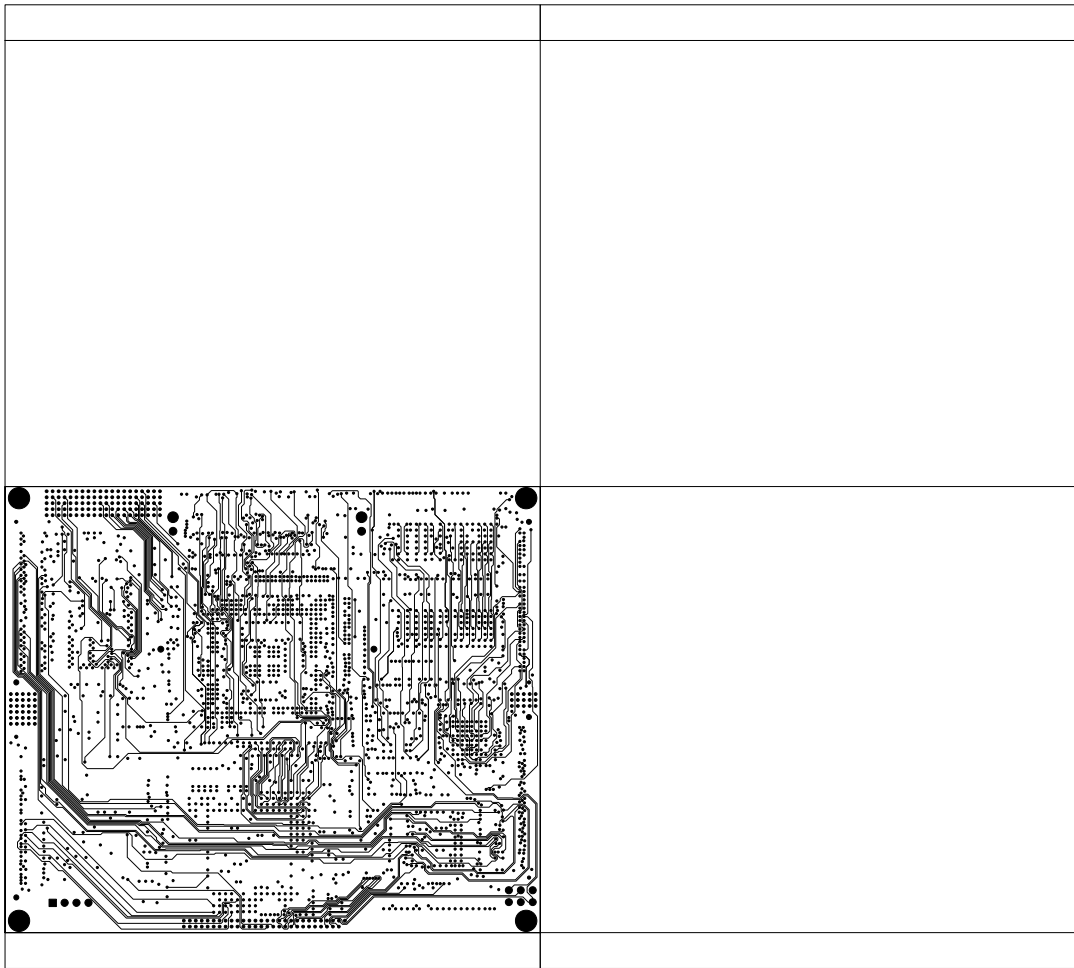
LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
000714 REV B
3-31-07

LAYER 3 CIRCUIT



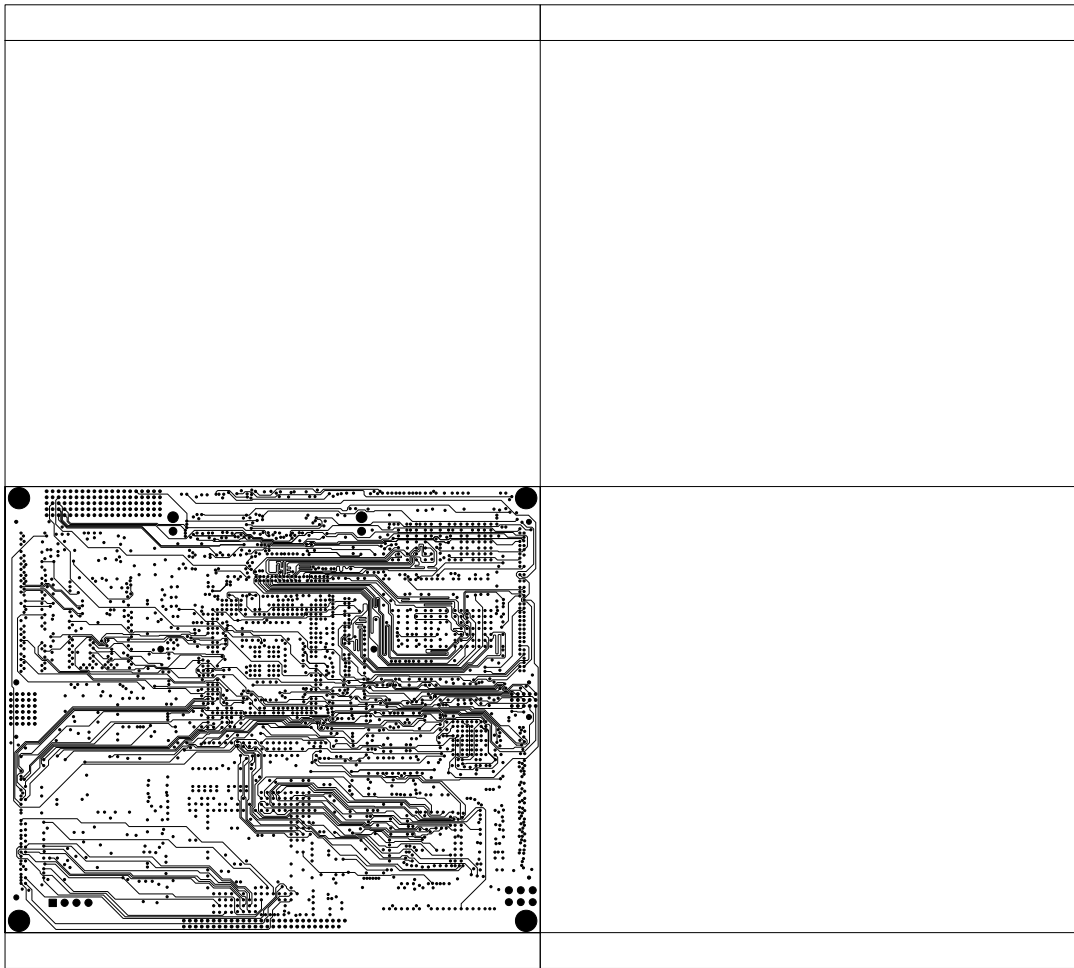
LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
000714 REV B
3-31-07

LAYER 4 CIRCUIT



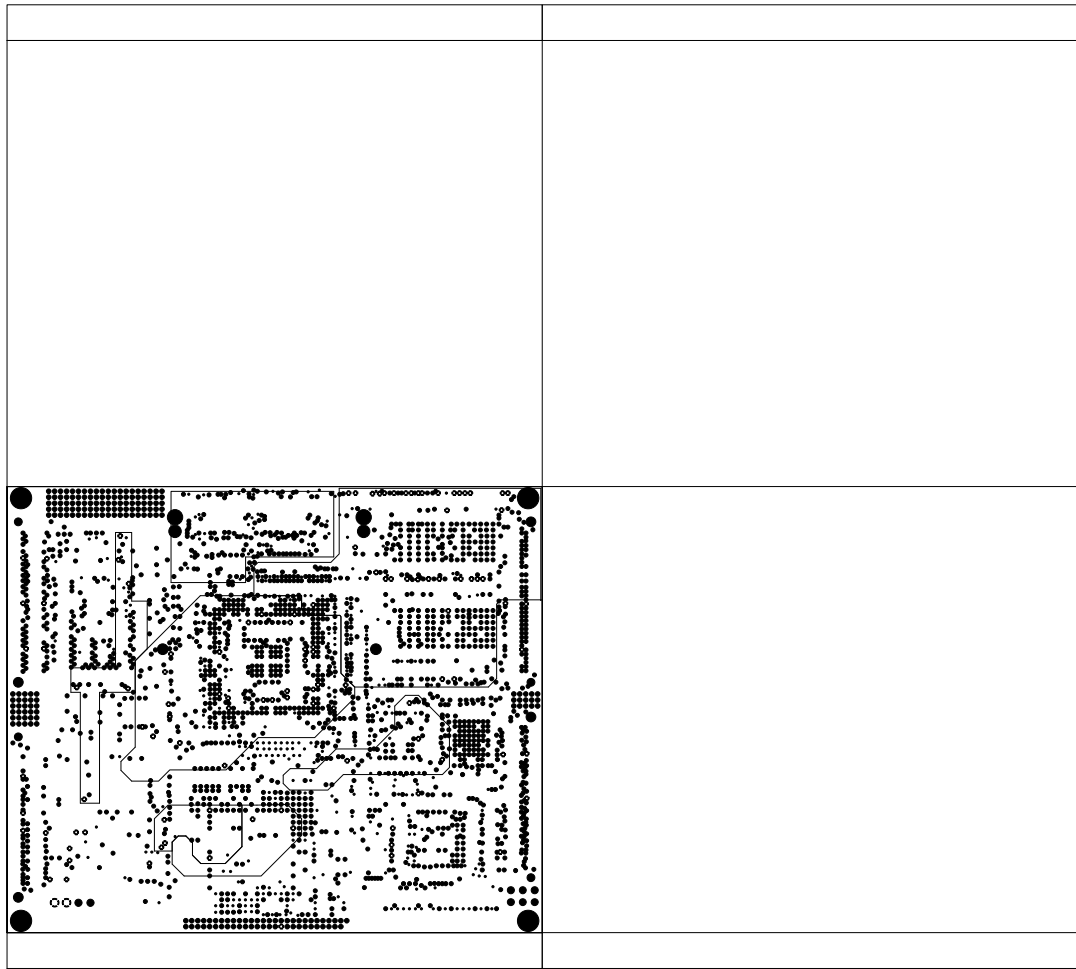
LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
000714 REV B
5-51-07

LAYER 7 CIRCUIT



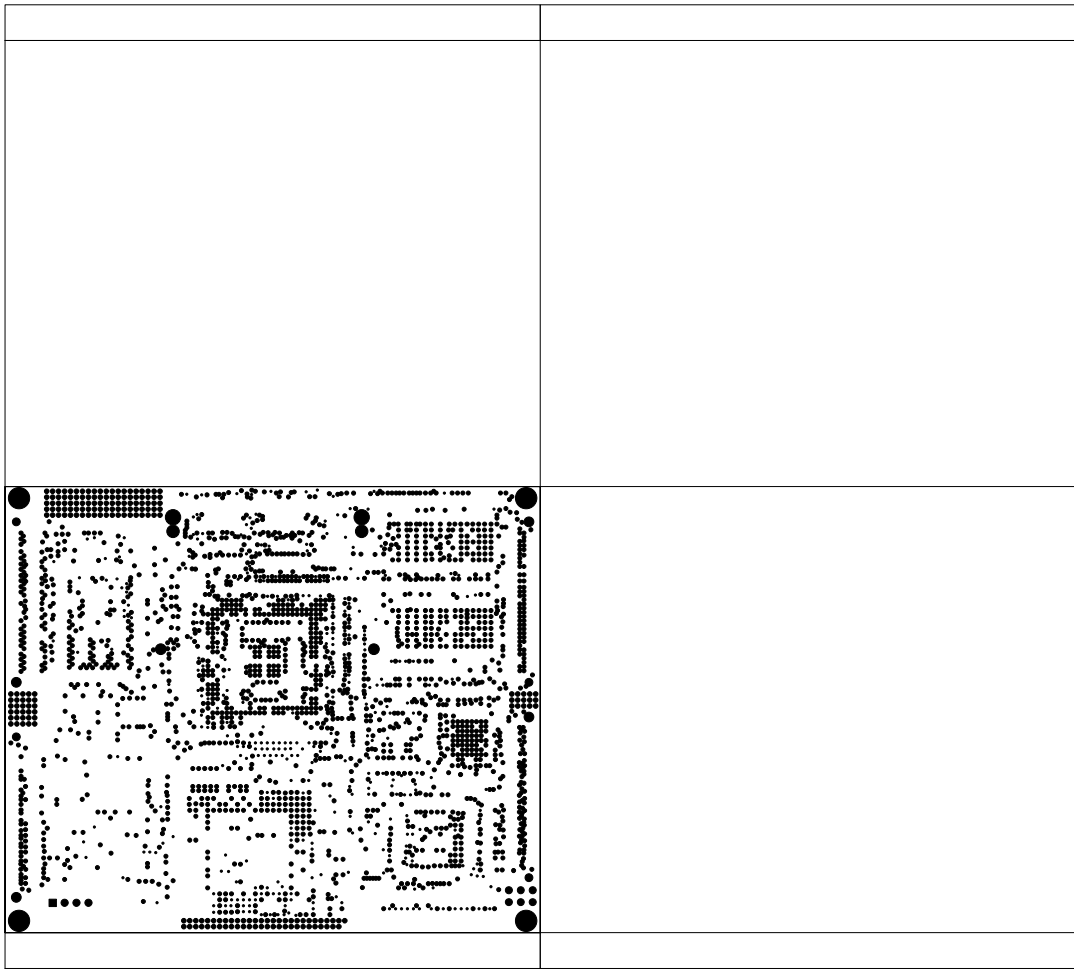
LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
000714 REV B
5-51-07

LAYER B CIRCUIT



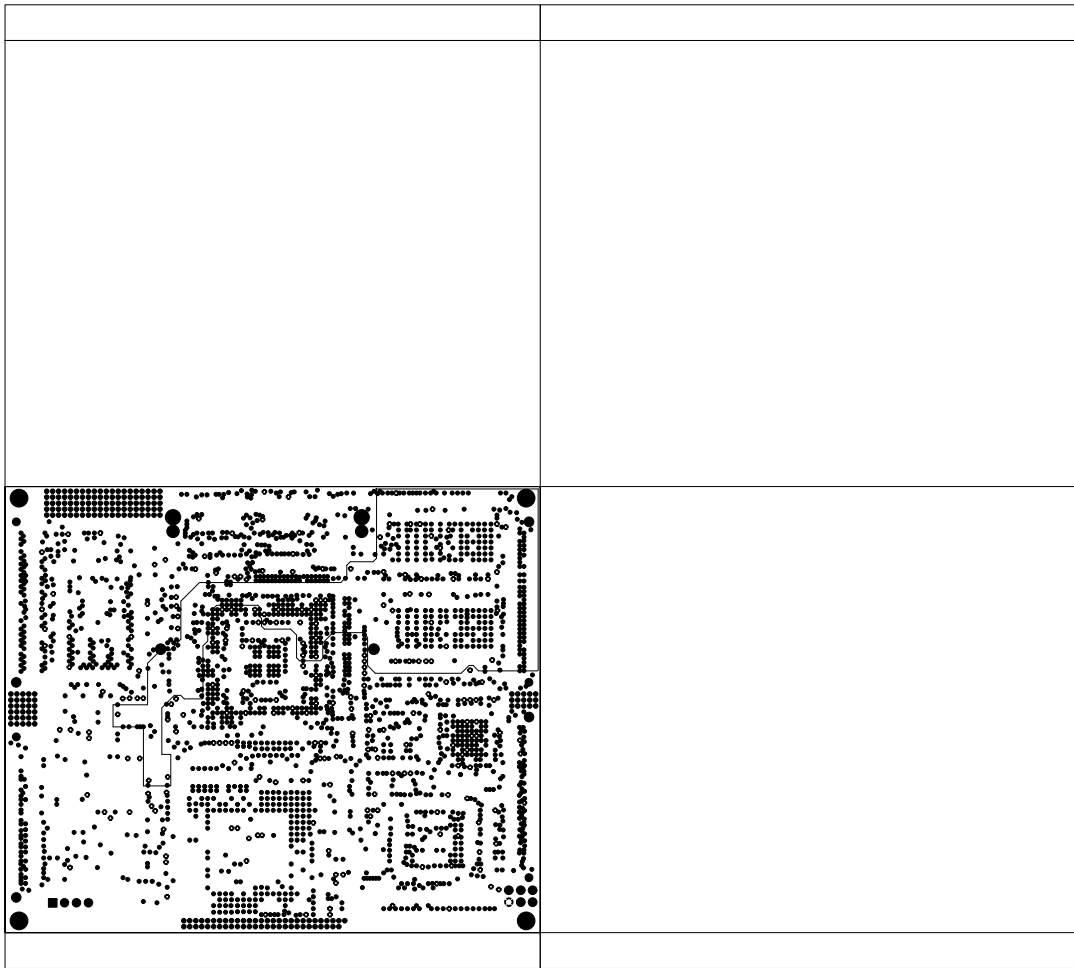
LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
000714 REV B
5-51-07

LAYER 5 PLANE POWER



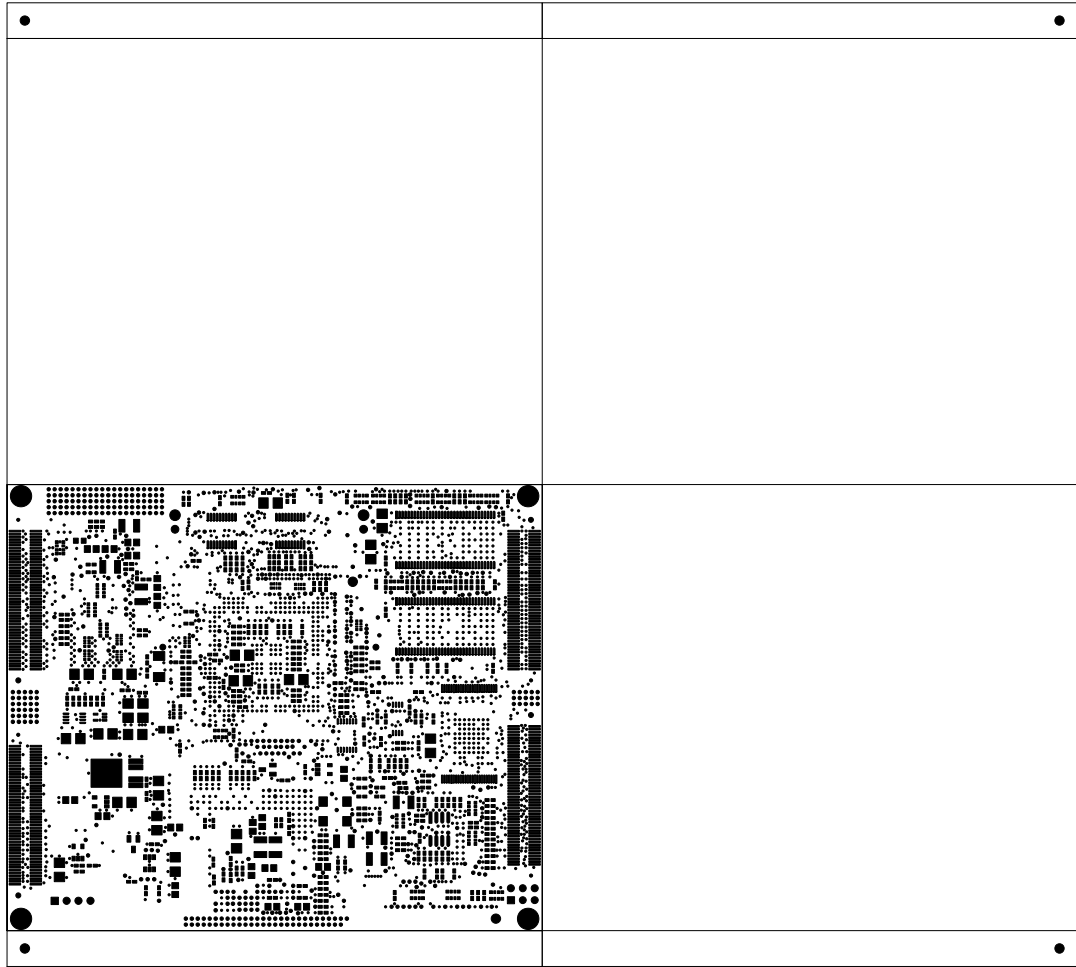
LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
00714 REV B
5-51-07

LAYER 4 PLANE 000



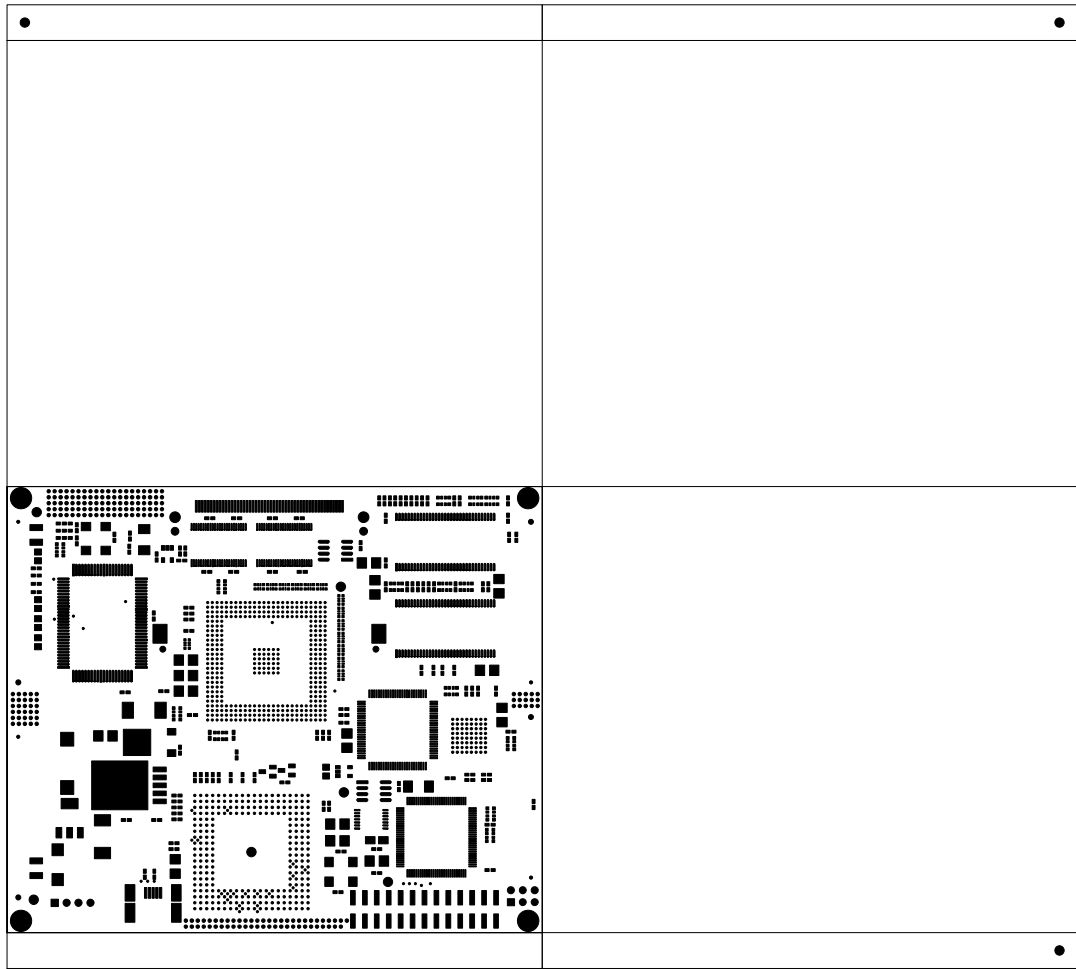
LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
500714 REV B
5-51-07

LAYER 9 PLANE POWER



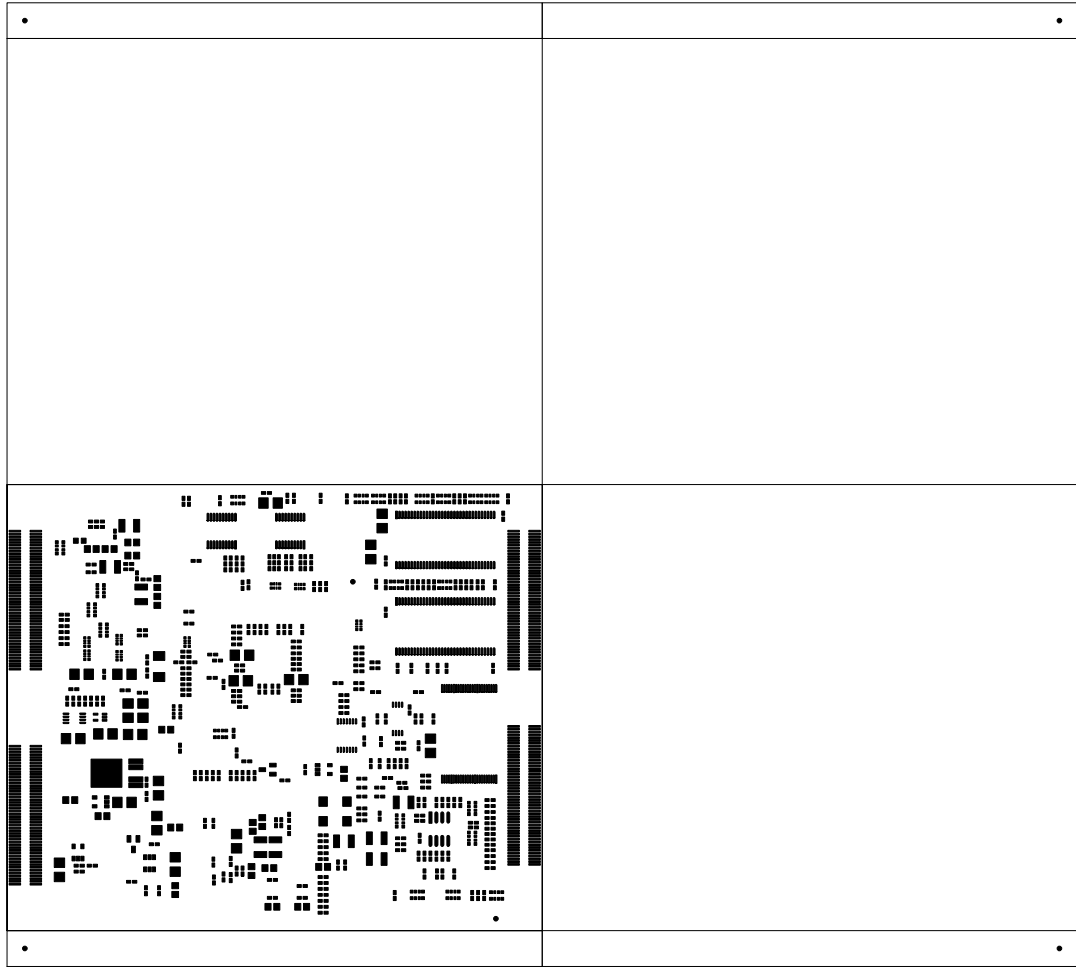
LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
007114 REV. B
5-51-07

SOLDER MASK BOTTOM SIDE



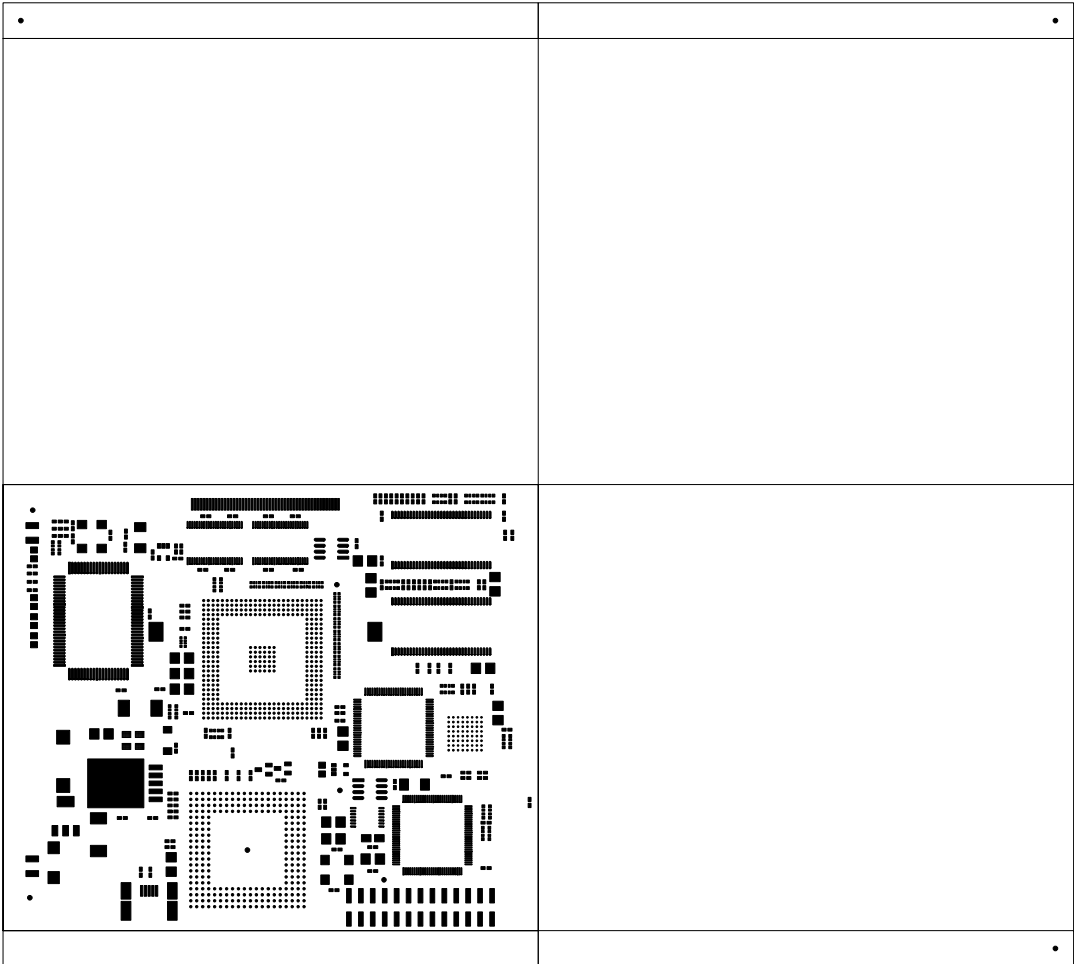
LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
000714 REV. B
5-51-07

SOLDER MASK TOP SIDE



LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
500714 REV. B
5-51-07

SOLDERPASTE BOTTOM SIDE

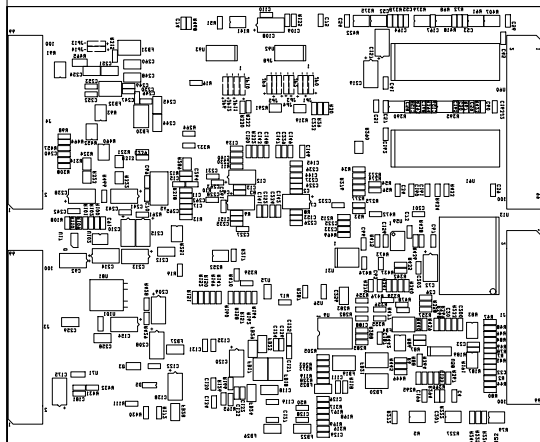


LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
007114 REV. B
5-51-07

SOLDERPASTE TOP SIDE

H - BAIT

E - BAIT

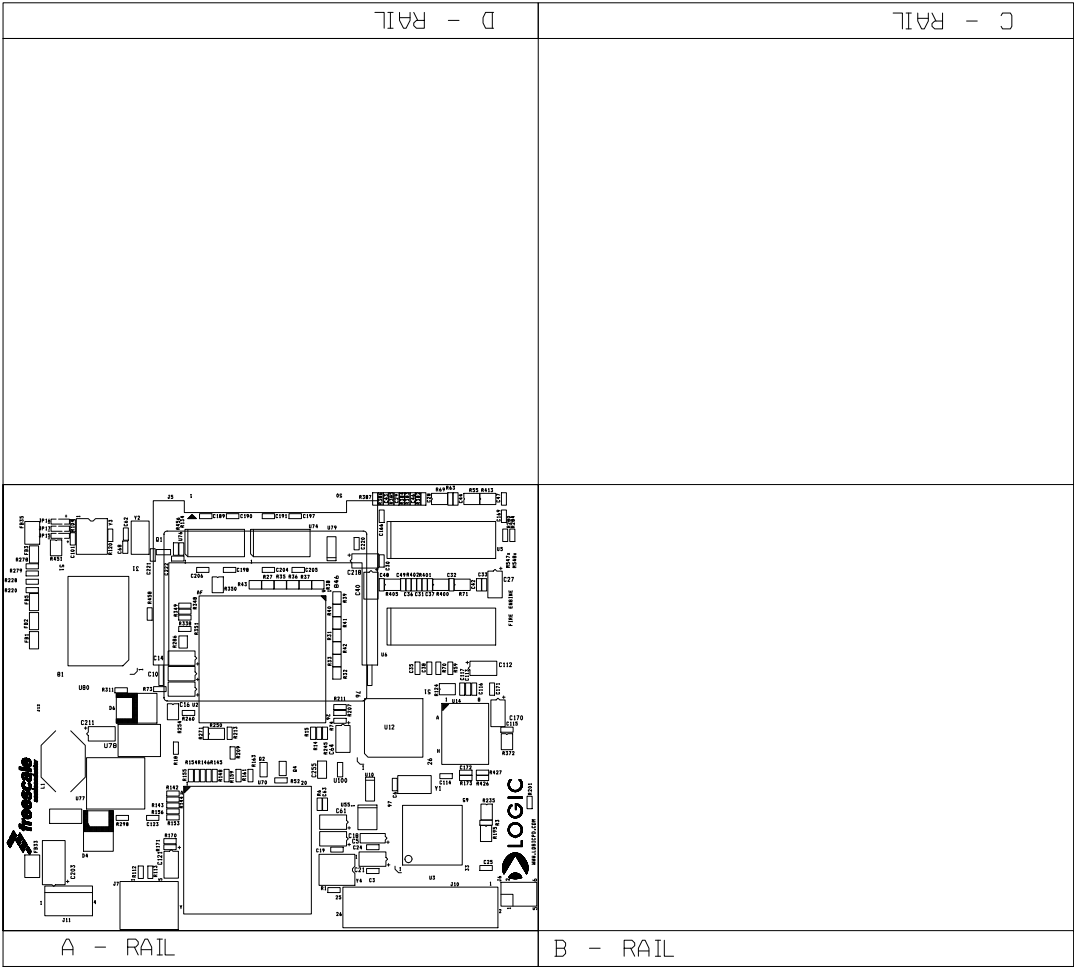


E - BAIT

F - BAIT

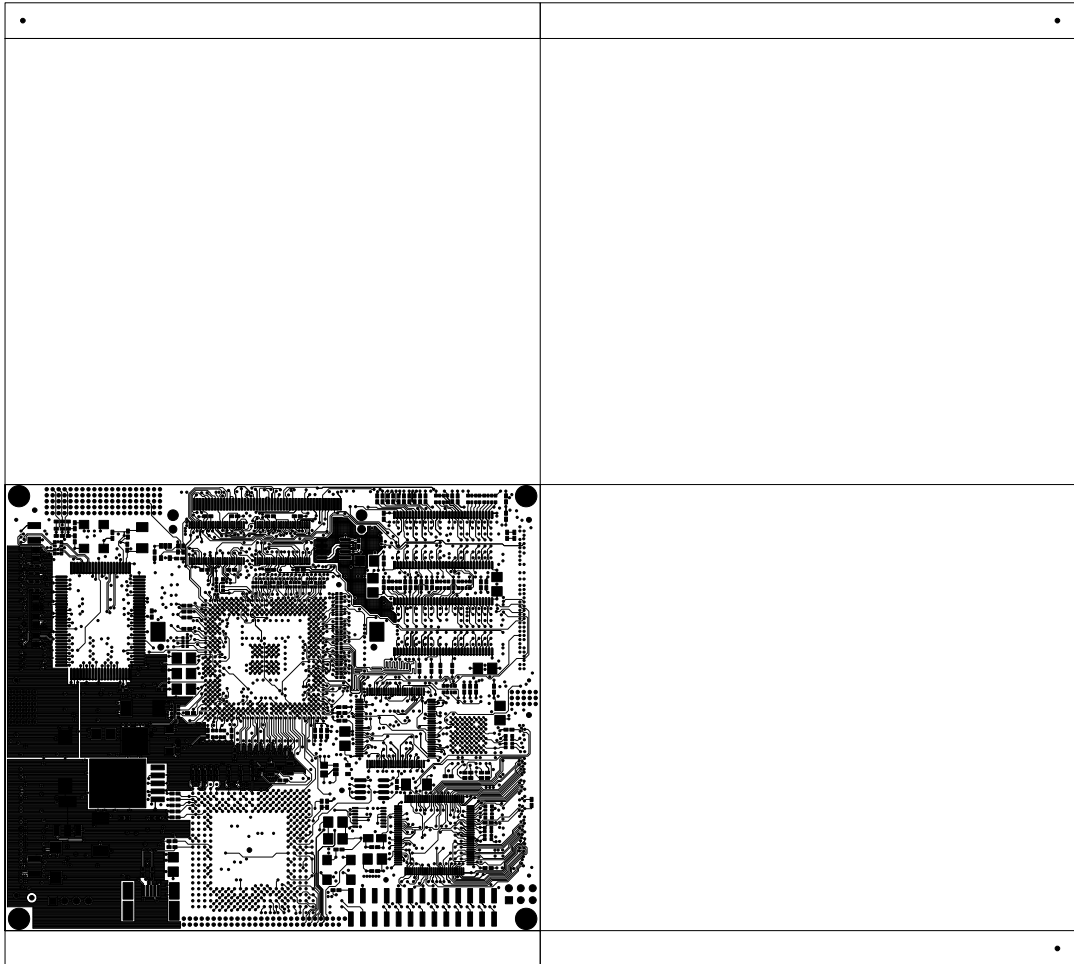
LOGIC PRODUCT DEVELOPMENT
NCF54xx FIRE ENGINE
000714 REV B
5-51-07

SILKSCREEN BOTTOM SIDE



LOGIC PRODUCT DEVELOPMENT
 NCF54xx FIRE ENGINE
 000714 REV. B
 5-51-07

SILKSCREEN TOP SIDE



LOGIC PRODUCT DEVELOPMENT
MCP54xx FIRE ENGINE
000714 REV B
3-31-07
LAYER 1 CIRCUIT TOP SIDE