1	2	3	4	5	6	7	8	9	10

A | 2-TE-0144-002-00-A | PROJECTION | THIS DRAWING CONFORMS TO B.S. 308

HOLE SIZES (FINISHED)				
TOOL	SYMBOL	SIZE(mm)	PLATED	QTY
T01	∘	0.3	YES	1311
T02	+	0.6	YES	2
T03	O	0.8	YES	154
T04	A	0.9	YES	62
T05	B	1.0	YES	69
T06	⊡	1.1	YES	2
	C	1.1	YES	82
T07	D	1.2	YES	17
T08	E	1.3	YES	4
T09	G	1.5	YES	2
T10	I	1.7	YES	100
T11	S	2.7	YES	4
T12	Y	3.3	YES	2
T13	⊚	1.7 x 0.9	YES	18
T14	⊚	2.7 x 0.9	YES	18

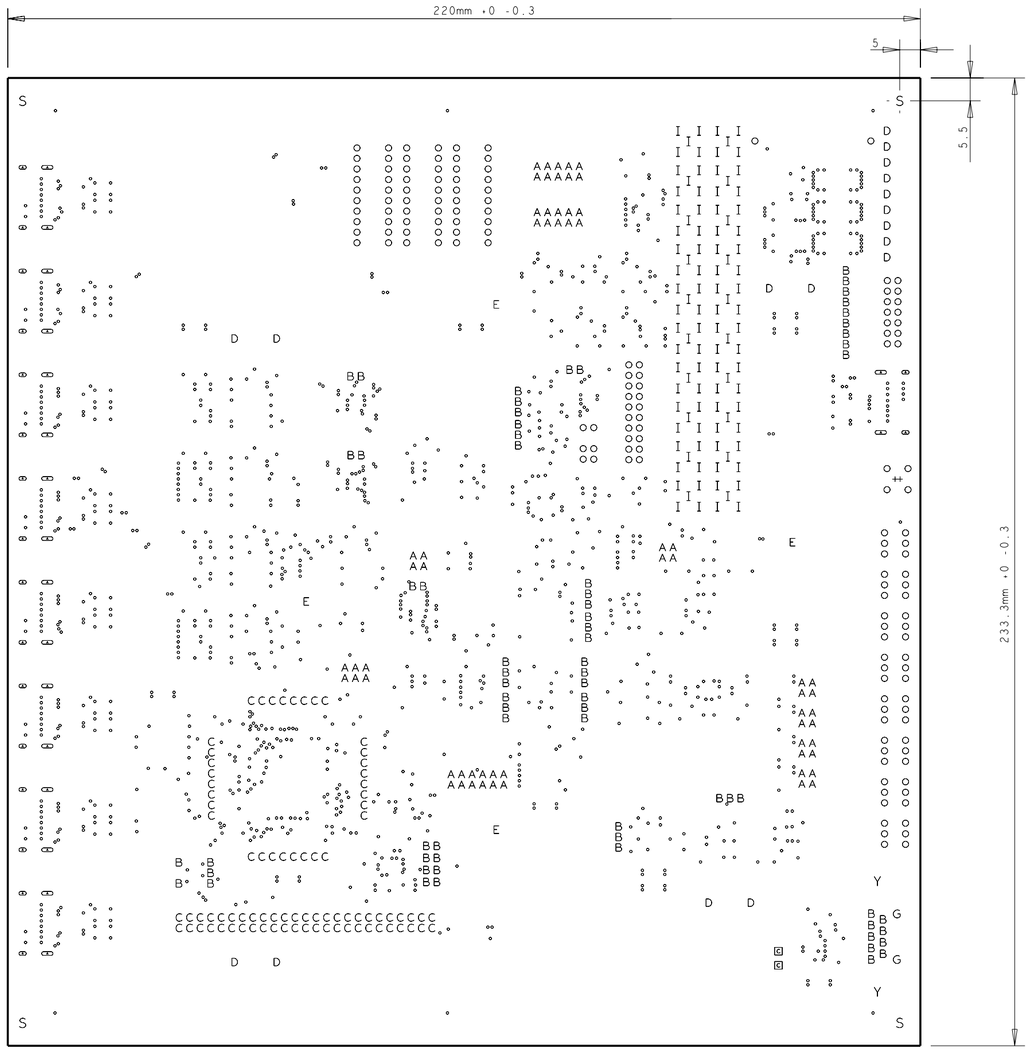
NOTE: T13 & T14 ARE OVAL SLOTS THAT CANNOT BE DRILLED BUT WILL REQUIRE NC ROUTING.

TABLE OF DIFFERENTIAL IMPEDANCE 100 OHMS				
LAYER	TRACK WIDTH	MIN. GAP	Zo	REF: LAYER/LAYERS
A	127um	152um	100	# SEE BELOW
C	100um	152um	100	@ SEE BELOW
F	100um	152um	100	@ SEE BELOW
H	127um	152um	100	# SEE BELOW

NOTE: ODB++ DATA USED

DIFFERENTIAL IMPEDANCE OF 100 OHMS REQUIRED BETWEEN PAIRS OF 127um TRACKS RUNNING IN PARALLEL SEPERATED BY A 152um GAP

@ DIFFERENTIAL IMPEDANCE OF 100 OHMS REQUIRED BETWEEN PAIRS OF 100um TRACKS RUNNING IN PARALLEL SEPERATED BY A 152um GAP



MANUFACTURING NOTES

1. STYLE : MULTILAYER (8 LAYERS)
2. MATERIAL : FR4 (CAPABLE OF HANDLING LEAD FREE ASSEMBLY PROCESS)
3. FINISHED BOARD THICKNESS : 1.6mm (+/- 10%)
4. BASE COPPER OUTER : 17 MICRONS, PLATED TO 35um
   INNER : 17 MICRONS
5. ACCEPTABLE BOARD BOW/TWIST: 0.75% OR LESS ACROSS THE DIAGONAL
6. COPPER FILL MAY BE ADDED TO ASSIST WITH A MORE BALANCED BUILD. CONSULT ENGINEER IF THIS IS NECESSARY.
7. FINISH : IMMERSION GOLD OVER NICKEL
8. SOLDER RESIST : GREEN, PHOTOIMAGABLE (2 OFF)
9. COMPONENT IDENT. : WHITE (2 OFF)
10. RELEASE : CERTIFICATE OF CONFORMITY

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LAYER STRUCTURE

LAYER	DESCRIPTION	COMMENT
I	COMPONENT IDENT. - TOP	
K	SOLDER RESIST -TOP	
A	TOP TRACKS	SEE IMPEDANCE TABLE
B	PLANE	MOSTLY COPPER
C	INNER TRACKS 1	SEE IMPEDANCE TABLE
D	PLANE	MOSTLY COPPER
E	PLANE	MOSTLY COPPER
F	INNER TRACKS 2	SEE IMPEDANCE TABLE
G	PLANE	MOSTLY COPPER
H	BOTTOM TRACKS	SEE IMPEDANCE TABLE
L	SOLDER RESIST - BOTTOM	
J	COMPONENT IDENT. - BOTTOM	

ISSUE	DATE	MOD NO.	DRAWN	CHECKED	APPROVED	STATUS
A	28-08-2008	- - - - -	D.J.BECKETT	D.J.BALLARD	M.POSTRANECKY	

TOLERANCE UNLESS STATED
GENERAL +/- 0.1 mm
HOLES +/- 0.05 mm

FINISH
SEE NOTES
REMOVE ANY BURRS

ORIGINAL SCALE 1:1
DO NOT SCALE
0 50mm

MATERIAL & SPEC
SEE NOTES

SURFACE TEXTURE micro m
√ UNLESS STATED

USED ON

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RUTHERFORD APPLETON LABORATORY CHILTON, DIDCOT, OXON, OX11 0QX

TITLE
PC3405M DRILLING
CALICE C&C

A | 2-TE-0144-002-00-A

TOTAL NO. OF SHEETS 1

A | 2-TE-0144-002-00-A