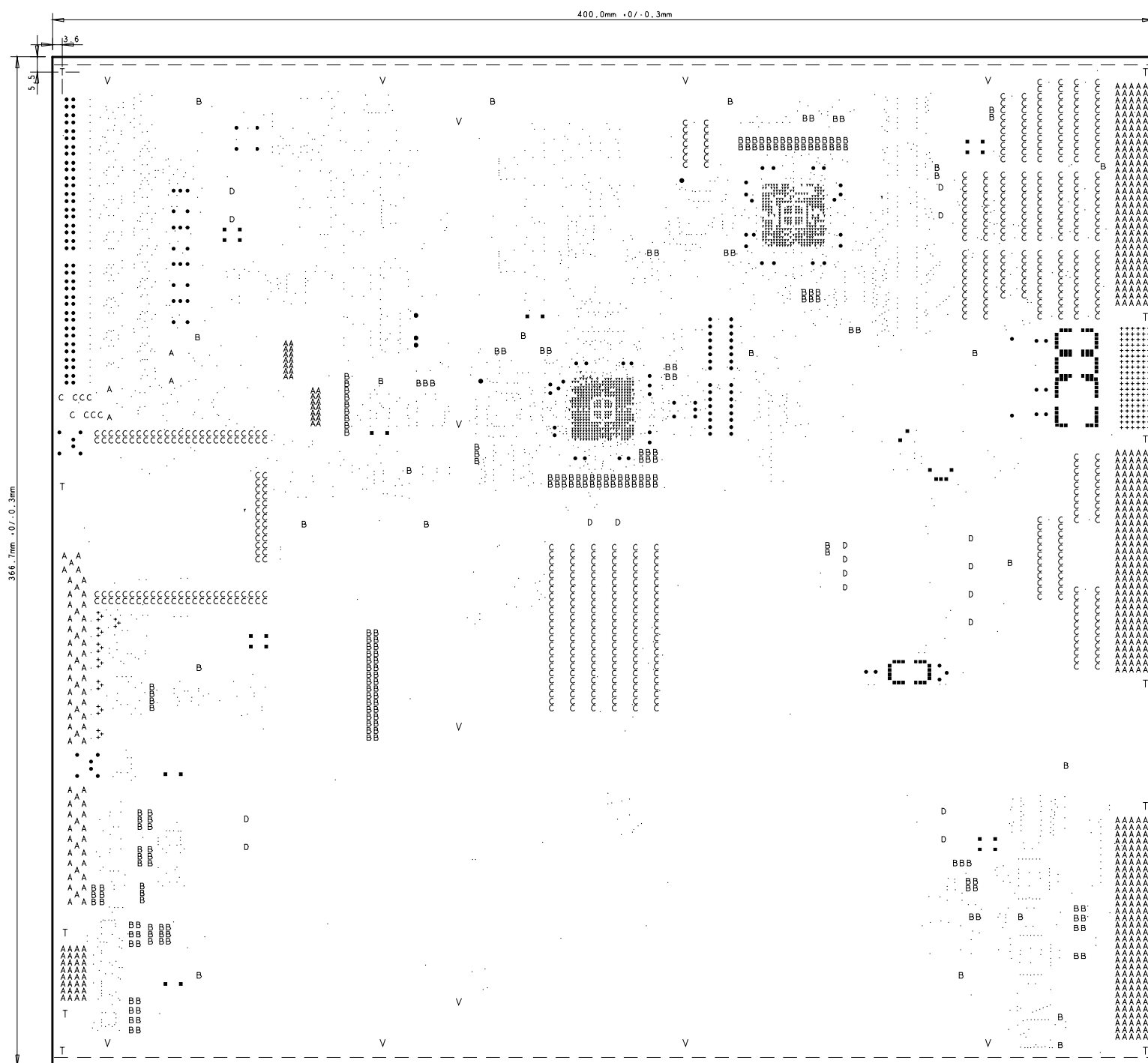
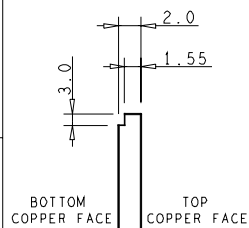




END VIEW OF CARD
NOT TO SCALE



MANUFACTURING NOTES

1. STYLE - MULTILAYER (10 LAYERS)
2. MATERIAL - FR4
3. FINISHED BOARD THICKNESS - 2.0mm (-/- 10%)
TOP AND BOTTOM EDGES MILLED TO 1.55 mm (SEE END VIEW)
4. BASE COPPER - OUTER - 17 MICRONS
INNER - 17 MICRONS
5. FINISH - IMMERSION GOLD OVER NICKEL
6. SOLDER RESIST - GREEN, PHOTOIMAGABLE (2 OFF)
7. COMPONENT IDENT. - WHITE (2 OFF)
8. RELEASE - CERTIFICATE OF CONFORMITY
9. BOARD BOW/TWIST TOLERANCE ACROSS THE DIAGONAL IS TO BE 0.75% OR LESS
10. COPPER GROUND FILL MAY BE ADDED TO ALL LAYERS WHERE NECESSARY TO ASSIST WITH A MORE BALANCED BUILD.
11. PLEASE SUPPLY CONTROLLED IMPEDANCE RESULTS AND TEST COUPONS

PC3216M ISSUE 3		
LAYER STRUCTURE		
LAYER	DESCRIPTION	COMMENT
K	COMPONENT IDENT - TOP	
M	SOLDER RESIST - TOP	MOSTLY RESIST
A	TOP TRACKS	SEE CONTROLLED & DIFFERENTIAL TABLES
B	GROUND PLANE 1	MOSTLY COPPER
C	INNER TRACKS 1	
D	INNER TRACKS 2	SEE DIFFERENTIAL IMPEDANCE TABLE
E	VCC PLANE	MOSTLY COPPER
F	VEE/3V3 PLANE	MOSTLY COPPER
G	INNER TRACKS 3	
H	INNER TRACKS 4	SEE DIFFERENTIAL IMPEDANCE TABLE
I	GROUND PLANE 2	MOSTLY COPPER
J	BOTTOM TRACKS	SEE CONTROLLED & DIFFERENTIAL TABLES
N	SOLDER RESIST - BOTTOM	MOSTLY RESIST
L	COMPONENT IDENT - BOTTOM	

HOLE SIZES (FINISHED)				
TOOL	SYMBOL	SIZE (mm)	PLATED	QTY
T01	-	0.2	YES	759
T02	-	0.3	YES	2482
T03	■	0.4	YES	119
T04	+	0.6	YES	138
T05	●	0.8	YES	198
T06	A	0.9	YES	609
T07	B	1.0	YES	232
T08	●	1.1	YES	5
T09	C	1.1	YES	582
T10	D	1.2	YES	18
T11	T	2.8	YES	11
T12	V	3.0	YES	12

TABLE OF CONTROLLED IMPEDANCE - 70-100 OHMS					
LAYER	TRACK P-CODE	TRACK WIDTH	MIN. GAP	Z ₀	REF. LAYER/LAYERS
A	■	.005"	N/A	B2	B (MICROSTRIP)
J	■	.005"	N/A	B2	T (MICROSTRIP)

■ RS274X GERBER FORMAT USED

TABLE OF DIFFERENTIAL IMPEDANCE - 100 OHMS					
LAYER	TRACK P-CODE	TRACK WIDTH	MIN. GAP	Z ₀	REF. LAYER/LAYERS
A	■	.008"	.005"	100	■ SEE BELOW
D	■	.005"	.009"	100	■ SEE BELOW
H	■	.005"	.009"	100	■ SEE BELOW
J	■	.008"	.005"	100	■ SEE BELOW

■ DIFFERENTIAL IMPEDANCE OF 100 OHMS REQUIRED BETWEEN PAIRS OF .005" TRACKS RUNNING IN PARALLEL SEPARATED BY A .009" GAP.
 ■ DIFFERENTIAL IMPEDANCE OF 100 OHMS REQUIRED BETWEEN PAIRS OF .008" TRACKS RUNNING IN PARALLEL SEPARATED BY A .005" GAP.

C	01-12-2004	TE255	D. J. BECKETT	D. J. BALLARD	M. POSTRANECKY	
B	29-07-2004	TE238	D. J. BECKETT	D. J. BALLARD	M. POSTRANECKY	
A	23-05-2003	- - -	D. J. BECKETT	C. P. DAY	M. POSTRANECKY	
ISSUE	DATE	MOD NO.	DRAWN	CHECKED	APPROVED	STATUS
TOLERANCE UNLESS STATED			FINISH		ORIGINAL SCALE	
GENERAL +/- 0.1 mm			SEE NOTES		1:1	
HOLES +/- 0.05 mm			REMOVE ANY BURRS		DO NOT SCALE	
MATERIAL & SPEC			SURFACE TEXTURE micro m		0 50mm	
SEE NOTES			UNLESS STATED			
USED ON						
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON. OX11 0OX OF THE RESEARCH COUNCILS						
TITLE			PC3216M DRILLING			
			TTC INTERFACE MODULE (TIM-3C)			
A 1-TE-0102-045-00-C						
TOTAL NO. OF SHEETS 1						