

Product Quality Audit Report

Date 20/11/2015	Customer (UNI09) Universitat zu Kiel				
Invotec Details	Tool Number 171441	Works Order 277370	Sales Order 275064	Layer Type MULTILAYER (8)	Release ECSS-Q-ST-70-11C
Customer Details	Part Number STEP FM digital		Part Issue V02		Purchase Order Number 441

PCB MARKINGS

Part number & Issue / revision level correct	Accept	1547
Manufacturers mark & date code correct	Accept	
Release coding (UL mark etc) correct	Accept	

GENERAL

Profiled edges free from loose fibres, pip marks etc	Accept	Spec: Actual: 0.1%
Bow and Twist within specification	Accept	
Materials / surface finish correct	Accept	
General appearance / workmanship	Accept	
Electrical Test complete	Accept	
Laboratory Test complete (Report available if required)	Accept	
Sample board included	Accept	

OUTER LAYER PATTERN

Annular Ring meets min requirements	Accept
Track width	Accept
Track spacing	Accept
Conductor pattern (Spurious copper etc within acceptable limits)	Accept

SOLDERMASK / ANNOTATION / PEELABLE MASK

Solder Resist colour / type	N/A
Annotation colour	N/A
No encroachment onto pads (other than by design)	N/A
Solder Resist free from skips, inclusions etc	N/A
Legend clear and legible	N/A
Adhesion	N/A
No contamination of component holes	Accept
Peelable mask - correct type / registration / coverage	N/A

DIMENSIONS / SCORE / BOARD THICKNESS

Outline dimensions correct	Accept	Spec: 1.60 +0.16 / -0.16 Actual: 1.62
Hole sizes correct	Accept	
Score lines - correct position / web thickness	Accept	
Board thickness - MM	Accept	

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Hole size summary

DIMENSIONAL SUMMARY

Hole Ref	Nominal	Tolerance		Actual	Type	Unit	Ref No	Nominal	Tolerance		Actual	Deviation	Unit
		+	-						+	-			
B	0.65	0.10	0.10	0.68	PTH	MM							
C	2.00	0.10	0.10	2.03	PTH	MM							
D	2.20	0.10	0.10	2.23	PTH	MM							

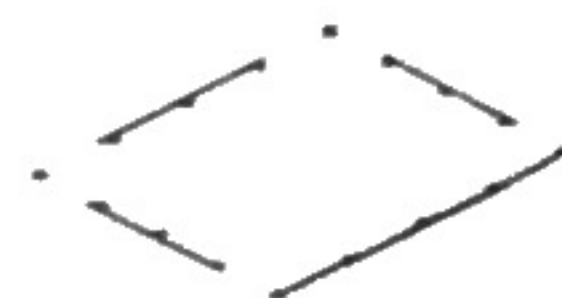
**Dimensional report
attached**

NOTES

PCB SERIAL NUMBER MEASURED AG3
UNABLE TO MEASURE 0.4 HOLE

COMPLETED BY

Lynnette Craig



Drawing No.	SO-STEP-C2_2389	Batch No.	AA 2	Date	19-Nov-15 7:09
Tool Number	171441	W/O No	277370	Inspector	S.WOODFORD
Customer	UNIVERSITAT ZU KI		Material	Notes	

Identifier	Dimension		Dim	Limit		Pass/Fail	Geometric Tolerance		
	Nominal	Actual		Upper	Lower		Actual	Limit	Pass/Fail
2mm Between Line and Circle	2.00	1.96	-0.04	2.10	1.90	PASS			
2mm Rad Unit 11	R1.97	R1.97	R0.00	R2.07	R1.87	PASS			
29mm Between Circle and Circle	29.00	29.00	0.00	29.10	28.90	PASS			
29mm Between Circle and Circle	29.00	29.00	0.00	29.10	28.90	PASS			
29mm Between Circle and Circle	29.00	29.00	0.00	29.10	28.90	PASS			
29mm Between Circle and Circle	29.00	29.01	0.01	29.10	28.90	PASS			
24mm Between Circle and Circle	24.00	24.00	0.00	24.10	23.90	PASS			
24mm Between Circle and Circle	24.00	24.00	0.00	24.10	23.90	PASS			
24mm Between Circle and Circle	24.00	23.99	-0.01	24.10	23.90	PASS			
100mm Between Line and Line	100.00	100.06	0.06	100.20	99.80	PASS			
120mm Between Line and Line	120.00	119.98	-0.02	120.20	119.80	PASS			
2mm Rad Unit 9	Ø2.00	Ø1.98	Ø-0.02	Ø2.20	Ø1.80	PASS			
24mm Between Circle and Circle	24.00	24.01	0.01	24.10	23.90	PASS			
2mm Rad Unit 29	R2.00	R1.96	R-0.04	R2.10	R1.90	PASS			
96mm Between Line and Circle	96.00	96.00	-0.01	96.10	95.90	PASS			
116mm Between Circle and Circle	116.00	116.00	0.00	116.10	115.90	PASS			
2mm Between Line and Circle	2.00	2.00	0.00	2.10	1.90	PASS			