



1.0 Client Information

Client Information	
Manufacturer Name	Aleph Objects Inc.
Address	123 SW 12th Street
City	Loveland
State	CO
Zip Code	80537
Client Representative	Seth Sinnema
Title	CTO
Phone	(970) 377-1111 Ext. 644
Fax	
Email	seth@lulzbot.com

2.0 Product Information - General

Product Information	
Product Name (as it should appear on test report)	TAZ 3D Printer
Model Number (of UUT to be tested)	KT-PR0010
Functional description of product (what is it, what does it do, etc.)	Creates 3D objects from CAD files by melting plastic and drawing the part layer by layer.
List all modes of operation	Warm Up and Printing
Can modes be operated simultaneously? If so, explain.	No
What mode(s) will be used for testing?	Printing
Product type (IT, Medical, Scientific, Industrial, etc.)	Commercial and residential
Is the product an intentional radiator	No
Product Dimensions	630mm x 520mm x 515mm
Product Weight	11kg (24.25lb)
Will fork lift be required	No
Applicable Standards, if known	FCC Part 15, ICES
Describe all environment(s) where product will be used (residential, commercial, industrial, etc.)	Indoors, usually office space
Does product consist of multiple components? (If yes, please describe each system component)	Yes, Main Printer unit and the Power Supply
Cycle time > 3 seconds? (If yes, how long?)	Yes, varies based on the size and quality of the part
Highest internally generated frequency	16mhz
Product Set-up Time	Less than 30 min
Boot up time in the event of an unintentional power down	Less than 10 min

Identify **ALL** I/O connections on the unit(s) under test, as well as **MAXIMUM** associated cable lengths below

Model No.	Description	I/O Type		Length (m)	Patient Connect? (See Note)	QTY
		UUT-UUT	UUT-SE			
N/A	USB A to B cord for connection to computer		USB	5	N/A	1
N/A	12VDC Power cord from P.S. To Printer	DC		1	N/A	1
5279	US 18 AWG Power cord C13/NEMA5-15 for PS	AC		1.83	N/A	1

Note: "Patient Connect" column applies only to medical devices.



3.0 Power

Power Requirements	
Does/can product connect to AC mains? (If so, can the UUT function when connected to AC?)	Yes, it must be connected to the mains
Input Voltage Rating as it appears on unit, power supply, or power brick	110 or 220 selectable by switch
Input Current (specify @ 230 Vac/50 Hz)	6.5Amp @ 110-120Vac 50/60hz
Single or Multi-Phase (If multi-phase, specify delta or wye)	Single phase
Is input power connector two-prong (Hot & Neutral) or 3-prong (H, N, Ground)	3-prong
Does UUT have more than 1 power cord? (If yes, explain.)	No

4.0 Unit Under Test (UUT) – Detailed Information

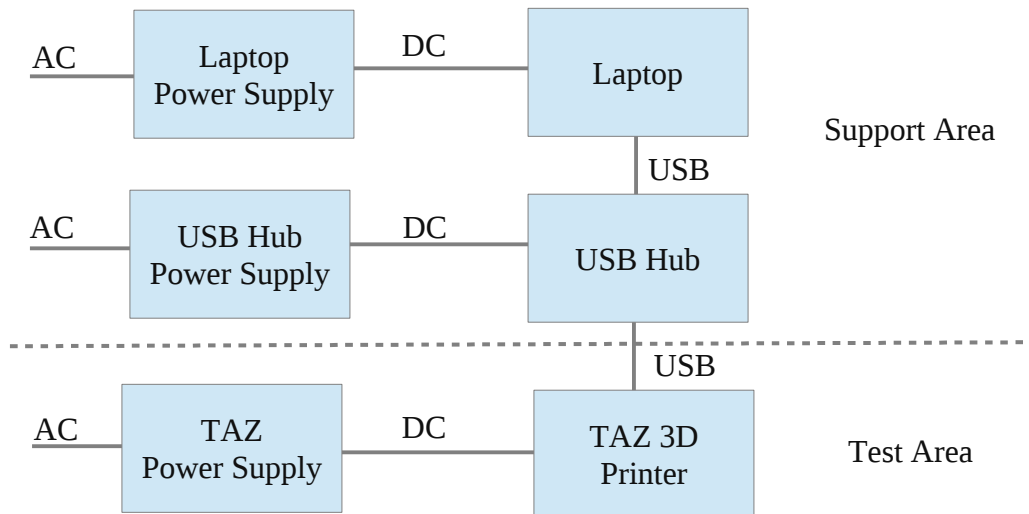
UUT Hardware			
Condition	On and printing with a 0.50mm nozzle		
Configuration During Test	Connected to S.E. Laptop and printing file y_end_set.gcode with ABS filament		
Input Power	110Vac 60hz		
UUT Components			
Name	Model No.	Serial No.	Description
TAZ	KT-PR0010	KT-PR0010-5034	TAZ 3D Printer
P.S.	S-360-12	KT-PR0010-5034	360W 12Vdc Power Supply
I/O Cabling			
See Section 2.0 for details			
UUT Software/Firmware			
Name	Version/Revision	Functionality	
Marlin	commit b3ebb717	On board firmware for pinter control and gcode interpretation	
UUT Operating Conditions			
List all frequencies generated/used by the product.	Does not intentionally generate any set frequencies. The frequencies that are produced depend on file being printed and print speed.		
How will product be exercised during test?	Printing part y_end_set.gcode with ABS filament		
How will product be monitored during test?	Visually (e.g. Is it moving about and printing?) as well as data monitoring on a computer.(e.g. Temp info and status updates) .		
What are the product’s critical parameters?	Nozzle Temp = 230°C , Bed Temp = 85°C		
Specify tolerance of all critical parameters.	Nozzle Temp ± 4°C , Bed Temp ± 5°C		



5.0 Support Equipment (SE) – Detailed Information

Support Equipment (SE)				
Name	Model No.	Serial No.	Description	
Laptop	Lenovo G570	CB14410739	Linux Laptop “poptart”	
USB Hub	Plugable USB 2.0 10-Port Hub	D11-00094126	USB 2.0 10-Port Hub	
SE I/O Cabling				
Model No.	Description	Shielded?	Length	Quantity
CPA-A065	Laptop power cord/power supply	No	10ft	1
DSA-15P-05	USB hub cord/power supply	No	6ft	1
N/A	USB 2.0 Standard to Mini cord	No	3ft	1
SE Software/Firmware				
Name	Version/Revision	Functionality		
Pronterface	commit 8f3e5947	Used for communicating with printer, setting temperatures, and loading and starting prints from .gcode files.		

6.0 Block Diagram



Important note: The product data sheet is a critical piece of documentation which is used as the basis for any test reports that EMCI will generate; it must be completed *prior* to testing. It should be reviewed carefully by the client. If incorrect information is provided resulting in revisions to test reports, the client will be subject to report revision fees.