| EVT2 - Engineering Validation Test — Begonia — Performance Septiment of the Performance Septiment of the Performance Septiment | | | Ea | ısyTA | Z Mini – Product Dev | /elopment | Cycle – v3 | .1_Draft | | | |
|--|--|--|-----------------------|---|---|--|---|---|---|-------------------|-------|
| EVT2 - Engineering Validation Test - Beginner Commission - Design Continue Commission Design Confided Commission 12-15 mechines 25 mechines 202 mere Confided Commission DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code melasse DVT Code mela | 06-09 06-1 | 16 06-23 06-30 07-07 | 7 07-14 07-21 07-28 | 3 08-04 | 08-11 08-18 08-25 09-01 | 09-08 09-15 | 09-22 09-29 | 10-06 10-13 | 10-20 10-27 11-03 | 11-10 11-17 11-24 | 12-01 |
| Design Validation Functionally focused Design Validation Functionally focused Verification - Reliability focused - RBF Value - State State 25 mechines 26 mechines 25 mechines 26 mechines 25 mechines 26 mechines 27 me | 92 | | | 49 |) | 20 | | (|) | | |
| 25 machines | | | | | | Approval Test | | Commences & | Announcement & | | |
| Set Design Conflig LOCKED Build SAT machines SAT Code freeze S | Desi | ign Validation – Functi | onally focused | | Verification – Reliability focused – RBF | | Qual – MFG/ Quality | | Ramp | Sell, Sell, Sell! | |
| Design Conting LOCKED LOCATE Set Samples rocy Fig. 1 Bill OVT machines OVT Code release OVT Code release OVT Code release Sat Code freeze (except video production) BB Design completed From protoppe From pr | CIOO | 11-15 mac | hines | | | | | | | | |
| LCD// Set samples recv Total Province Total Province Production Province Province Production Province Production Province Province Production Province Production Province Province Province Production Province | Design Config LOCKED auto bed leveling, hexagon nozzle | | | | Build DVT machines | | Build SAT machir SAT Code freeze | | | | |
| Items to Validate: # of machine Items to Verify: # machine 1) Printability 5 | | LCD/T.Scr samples recv. 7/01 BB Design com 7/08 Order L | 7/25 DVT 3 Core/BB | DVT Entry | Order Daffodil long lead & low risk parts 8/29 Foam prototype | Order F long lea 9/19 SAT Entry | | Ship | e d | | |
| Type of Test 1 Can it print as well as Guava 1 Print-Visual/Time measur 2 A hr 2 Is bed leveling working 3 Frame Stiffness 3 Hot, Hot/wet, Cold 4 Bu 5 Drop test 6 Near/far field test & FCC Test Acceptance or Pass/Fail Criteria 1 No Calibration drift, visual/Measurement, dimension 3 Accuracy, consistency, 4 Visual printing quality PAC Seth: Signed Off Steven: Chris: Type of Test How long? 1 Print-Visual/Time measur 2 4 hr 2 Short print/Cal, 24hr print 3 hr/ea 1 Assembly test run Type of Test Long term reliability 72hr Assembly test run Type of Test Long term reliability 72hr Assembly test run Type of Test Long term reliability 72hr Assembly test run Type of Test Long term reliability 72hr Assembly test run Type of Test Long term reliability 72hr Assembly test run Type of Test Long term reliability 72hr Assembly test run Test Accept or P/F Criteria No Calibration drift, visual/Measurement, dimension Accuracy, consistency, visual printing quality - MFG/ "Ship" config hence NO change unless last minute discovery renders machine not shippable, require PAC approval PAC Seth: Chris: | 1) Printa 2) Repe 3) Usera 4) Mech | tems to Validate: # of machine 1) Printability 5 2) Repeatability use above 3) Userablity use above 4) Mechanical Spec use above | | | 1) Performance(speed,) 2) Repeatability/Reliability 3) Userability 4) Environmental 5) Op Shock/ Vibration 6) Non-Opshock | # machine 15 use above use above 3 3 use above | Manufacturabili | ty 30 | | | |
| 1) | Is bed leveling working Frame Stiffness Basic Electronics Function | | | 1) Print-Visual/Time measur 2) Short print/Cal, 24hr print 3) Hot, Hot/wet, Cold 4) Bu 5) Drop test | 24 hr | Long term relia | • | | | | |
| After config "locked" date unless program risks such as schedule, cost, are studied & approved by the Project Approval Committee (PAC-stakeholders) PAC Seth: Steven: Chris: Cycles allowed, no design - config/architect- related changes unless approved by PAC unless alst minute discovery renders machine not shippable, require PAC approval Config/architect- related changes unless approved by PAC Chris: | 2) 3) | | | | 1) 2) 3) | uil Criteria | No Calibration of Measurement, of Accuracy, consi | drift, visual/ dimension istency, | | | |
| Signed Off Steven: Chris: | schedule, cost, are studied & approved by the | | | | cycles allowed, no design - config/architect- related changes | | | | unless last minute discovery renders machine not shippable, require PAC | | |
| Chris: | PAC | Seth: | | | | | | | | | |
| Chris: | Signed Off | Steven: | | | | | | | | | |
| | | | | | | | | | | | |
| | | | Jeff: | | | | | | | | |

| EasyTAZ Mini – Product | Development Cycle_ Software | e & Firmware Function | ons & Features | | |
|--|--|--|--|--|-----------------|
| 06-09 06-16 06-23 06-30 07-07 07-14 07-21 07-28 08-04 | | | | 11-10 11-17 11-24 | 12-03 |
| 92 49 | | | 10 20 10 21 11 00 | 11 10 11 11 11 11 11 | 12 0. |
| EVT2 - Engineering Validation Test Begonia | DVT - Design Verification Test Camellia | SAT–Design Maturity / Ship Approval Test –Daffodil- | Production Commences & Inventory Buildup | Product Announcement & Sales start | Cyber Monday |
| Design Validation – Functionally focused | Verification – Reliability focused – RBF | Qual – MFG/ Quality | Ramp | Sell, Sell, Sell! | |
| 11-15 machines | 25 machines | 30-50 machines | 120-140 machines | 30-40/wk | |
| 5 5 | 8/11 Build DVT machines DVT Code release | 9/22 Build SAT machines SAT Code release (except Video production) | 10-20 Start production | 11-10 Announce product | |
| 6/24 LCD/T.Scr samples recv 7/01 BB Design completed 7/08 Order DVT frames 7/25 S/08 DVT Frames EVT testing Entry Review | | roduction 10-17 d & low risk parts Ship Approve | ed | | |
| Expected SW/FW Functions & Features - Octoprint/Octoscript - Proof of concept UI Flow | - Basic UI - Working custom SD Image - Repo with packages for Slic3r, Octoprint, Custom Software - Ability to load files from USB drive - Connect/configure wifi - Control LED Strips via software - Web Daemon frontend for system calls - Onboard Slicing / STL Repair | - Polish UI Design - Incorporate Video/Help - Bug fixes | | | |

| | Fa | svTΔ7 Mir | ni – Pro | duct Development Cycl | e FIF | ECTRONICS CO | NEIGI | IRATION | | |
|--|---|----------------------------------|--|---|---|---|----------------------------------|-------------------------------|----------------------------|-----------------|
| 06-09 06-16 06-2 | | | | 08-11 08-18 08-25 09-01 09-0 | | | | | 11-10 11-17 11-24 | 12-0 |
| | 0 00 00 01 01 01 01 | 21, 07 22, 07 1 | | | 20 | | 10 10 | 10 20 10 2. 11 00 | , 11 10 11 11 11 11 11 | 12 0 |
| 92 49 | | | | | | SAT-Design Maturity | / Shin | Production | Product | |
| EVT2 - Eı | ngineering Validatior Begonia | n Test | | DVT - Design Verification T Camellia | est | Approval Test -Daffodil- | | Commences & Inventory Buildup | Announcement & Sales start | Cyber Monday |
| Design Valid | lation – Functionally | focused | | Verification – Reliability focused – RBF | | Qual – MFG/ Quality | | Ramp | Sell, Sell, Sell! | |
| | 11-15 machines | | | 25 machines | | 30-50 machines | | 120-140 machines | 30-40/wk | |
| Design Config LOCKED auto bed leveling, hexagon nozzle PcD-Core/Baseboard, LCD | | | | 8/11 Build DVT machines DVT Code release | | Build SAT machines SAT Code release (except Video production) 10-20 Start production | | | Announce product | |
| 6/24 LCD/T | C.Scr samples recv 7/01 BB Design completed 7/08 Order DVT frames | 7/25 3 Core/BB EVT testing | 8/08 DVT Entry Review | 8/18 Order Daffodil long lead & low risk parts 8/29 Foam prototype checkpoint | | roduction d & low risk parts | 10-17 Ship Approved | | | |
| Expected Electronic Configuration Motion Controller Rambo 1.3L/Mini RAMBo Comm Controller: Olimex | | | Mini- Rambo, rev? Linksprite: Core + Baseboard, rev | 1.0 | Mini- Rambo, rev? Core/ Baseboard, rev | ? | | | | |
| LCD: USB: WiFi: | Olimex Extension None as of now | | | Linksprite LCD (1280x800) (rev ?) Baseboard Ports (x4) Dongle | | Linksprite LCD (1280x Baseboard Ports (x4) Dongle | (800) (rev | <i>(</i> ?) | | |
| - - - - | | | | LEDS Speaker - - - | | LEDS Speaker - - - | | | | |
| - - - | | | | - | | - - | | | | |
| | | | | | | | | | | |