



PARTS CONTROL

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TIDI Parts Program

- **Classified in two Part Categories**
- **Flight Parts**
- **Prototype Parts**
- **Stored separately**
- **Flight parts undergo incoming inspection, traceability recording, transfer to bonded stores**
- **All parts handling and operations use ESD Control Measures to assure prevention of ESD damage**



TIDI Parts Program

- **EEE Parts List in Appendix**
 - 98 Standard Part Types qualified to PPL21 Grades 1, 2 & APL PAR Defined Grade 3 (MIL-STD, SMD, etc)
 - 24 Non-Standard Part Types. Qualified for TIDI Flight use via:
 - Procurement to SCD specifications
 - Performing DPA, Rescreen per PPL Appendix C to attain qualification equivalent to PPL Grade 1, 2 or APL PAR Defined Grade 3
 - Temp Cycling (including assembly level environments)
- **Prototype Parts**
 - Functionally Identical to Flight
 - Commercial Equivalents primarily used
 - Military Grade used if t range, elect. parameters, tolerance required
 - Flight lots used if excessive quantities bought due to min. orders



Non-Standard Parts

Part Number	Mfr	Procurement Specification	Additional Qualification Tests	Notes
Capacitors				
J93BXXXASW	CRC	Specs & QCI per Mil-C-83421		Grade 2 equivalent
CDR25BP***KSR	ATC	Mil-C-55681/5	100% Lot Pull Test (Non-Destructive)	GCMS NSPAR 12
HSN***KS	KDC	MIL-C-49467 (Group A Screen)	SLAM	GCMS NSPAR 14
Diodes				
OM4201ST/RTV	OMN	Mil-PRF-19500		Grade 2 equivalent
OP224TXV	OPT	Mil-PRF-19500		Grade 2 equivalent
Transistors				
2N3822	MOT	Commercial	5-Sample DPA, Screen per PPL 21 Apdx C	Appendix C, Table 09
2N3811	MOT	Commercial	5-Sample DPA, Screen per PPL 21 Apdx C	Appendix C, Table 09
2N3375	MOT	Commercial	5-Sample DPA, Screen per PPL 21 Apdx C	Appendix C, Table 09
2N2920	MOT	Commercial	5-Sample DPA, Screen per PPL 21 Apdx C	Appendix C, Table 09
OP604TXV	OPT	Mil-PRF-19500	Mil-PRF-19500	Grade 2 equivalent
Resistors				
TK633	CAD	Tested to MIL-R-55182/9		Grade 2 equivalent
4610X-R2R-503	BOU	Tested to MIL-R-83401		Grade 2 equivalent
HC8237	HYC	Tested to MIL-R-83401		Grade 2 equivalent
Microcircuits				
28C010TRPFS	SEI	MIL-M-38510, Class S equivalent		Grade 1 equivalent
PIC7521/27 (PIC602/627)	MIC	Per Microsemi UL101-T2	5-Sample DPA	Grade 2 equivalent
MAX4429	MAX	Commercial	5-Sample DPA, Screen per PPL 21 Apdx C	Appendix C, Table 10
Special Devices				
055-****	SPRL	Custom Inductors & Transformers	Per SPRL Process (Therm Shock& Electricals)	NMS NSPAR # 066
500MHR	Lucas	Per Mfr Specification		
715AS15	GI	Per Mfr Specification		UARS/HRDI Lamp
16,000 and 16,384 MHz	PIZ	Per Mfr Specification	5-Sample DPA, PIND, Radiography	Internal Water Vapor Content?
RA68-19-001Z	BEI	SCD 055-1340		
11-SHBD-45AJ	LIT	SCD 055-1341	Operational Life Test under Vacuum	Filter Wheel
ST-005 A	SITE	SCD 055-3479	Testing as outlined in SCD	
Heaters	MIN	S-311-P-79 and -80		Space Flight Qualified



Availability

TIDI PARTS DELIVERY SCHEDULE

9 Apr 98 SR

Device	FY98				FY99				Notes / Used On				
	1	2	3	4	5	6	7	8		9	10	11	12
JANTXVIN6325				△									FS
BEI Rotary Actuator													Telescopes
Filter Wheel Motor, Litton													Filter Wheels
Interpoint DF2815 Hyb													FS, prototype due 5/18
Interpoint SF2805 Hyb													FS, prototype due 5/18
SITe CCD													Sensor
RLE05								△	FM Assembly Start				Various
HV Capacitor, 3KV													Cal Deck
RNC 50 (2 valves)													DA, TS
AD590 Temp Sensor													FS, FC, MD, HN, Profiler
Neon and HAK Lamps													Cal Deck
16 MHz Crystal													FC, CC
12-bit R2R ladder													CC, TS
AD674													DA
SEI EEPROM													FC