

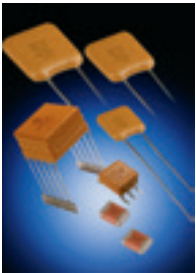


ESCC QUALIFIED PARTS LIST

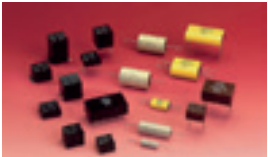
AUGUST 2022

CAPACITORS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Ceramic, Fixed		
367	Type II, High Capacitance	Kyocera AVX (NI)	3001/030-034 3009/034
315 E	Type II, Types CNC 31 to CNC 34	Exxelia Technologies	3001/037
306 E	Type II, Types CNC 53 to CNC 56	Exxelia Technologies	3001/038
	Ceramic Fixed Chip		
109 Q	Type I	Kyocera AVX (FR)	3009/003-...-022 (5)
323 D	Type I, Types CEC2*S to CEC19*S	Exxelia Technologies	3009/003-...-042 (8)
110 Q	Type II	Kyocera AVX (FR)	3009/008-...-023 (5)
324 C	Type II, Types CNC2*S to CNC19*S	Exxelia Technologies	3009/008-...-043 (8)
331 C	Type II, Types TTP 0402, 0603, 0805, 1206, 1210, 1812, 2220	Kyocera AVX (NI)	3009/041
	Tantalum		
196 K	Type TAJ	Kyocera AVX (CZ)	3012/001
327 D	Low ESR, Type TES	Kyocera AVX (CZ)	3012/004
366 A	Type TCS	Kyocera AVX (CZ)	3012/006
	Fixed Film		
251 K	Type HT86PS, High Voltage	Exxelia Technologies	3006/022
353 A	Type PM94S, PM948S, PM90S, PM907S	Exxelia Technologies	3006/020-...-026 (4)
	Semiconductor		
286 F	Type 101M, 201M, 400M and 401M	Cobham Microwave	5711/002



Stacked Ceramics
3001030/3001034
Source: AVX N.I.



Exxelia PM Capacitors
Source: Exxelia Technologies



Type TAJ
Source: AVX CZ



MDM
Source: C&K Components

Sub-D



SMA DC-22 GHz
Source: RADIALL



3401015201B071597-PN-SN-01
Source: Souriau



KMC Series
Source: Smiths Connectors Hypertac



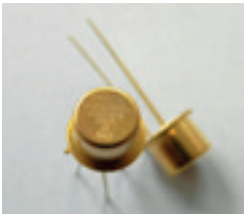
32s107-302n5-a
Source: Rosenberger

CONNECTORS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Multipin, Solder Contacts		
71 T	D*M Series, Rectangular	C&K Components	3401/001-...-080 (6)
155 P	D*M Series, Rectangular	Souriau Connection Technology	3401/001-...-072 (5)
	Multipin, Crimp Contacts		
72 T	D*MA Series, Rectangular	C&K Components	3401/002-...-097 (5)
156 N	D*MA Series, Rectangular	Souriau Connection Technology	3401/002-...-072 (6)
025 S	DBAS Series, Circular	TE Connectivity (Deutsch)	3401/008-...-064 (4)
220 K	Series I, Circular, Crimp	Souriau Connection Technology	3401/052-...-062 (3)
221 K	Series II, Circular, Crimp	Souriau Connection Technology	3401/044-...-062 (3)
222 K	Series III, Circular, Miniature	Souriau Connection Technology	3401/056-...-070 (5)
223 J	Series III, Hermetic	Souriau Connection Technology	3401/057
	Printed Circuit Board		
099 R Rev 1	HE 801 Series	Smiths Interconnect Hypertac	3401/016-017
149 P Rev 1	KMC Series	Smiths Interconnect Hypertac	3401/039
250 K	MHD Series	Smiths Interconnect Hypertac	3401/065
281 G	IHD INTERPOSER	Smiths Interconnect Hypertac	3401/076
	R.F. Coaxial		
068 R	SMA Series	Radiall	3402/001-...-003 (3)
283 G	SMA 2.9	Radiall	3402/021-...-023 (3)
329 D	SMA, SMA 2.92, TNC and SMP	Rosenberger	3402/001-...-026 (12)
350 B	TNC-VHP	Radiall	3402/027-028
	Micro-miniature, Crimp Contacts		
140 R	MDM Series, Rectangular	C&K Components	3401/029-...-087 (4)
141 R	MTB Series, Rectangular	C&K Components	3401/031
290 F	MDMA, Rectangular	C&K Components	3401/077-078
301 E	8MCG, Rectangular	Souriau Connection Technology	3401/081-...-088 (5)
370	MDM, MDSA -Click	Axon' Cable	3401/029-...-091 (3)

CRYSTAL AND OSCILLATORS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Crystals		
333 C	TO-5 Can	RAKON	3501/018
334 C	TO-8 Can	RAKON	3501/019
	Crystals		
371	RK135	RAKON	3503/001



Rakon Crystals
Source: ESA

FILTERS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Feedthrough		
375	Type SFC030	Exxelia Technologies	3008/020
	SAW		
313 E	SAW filters (transversal band pass/ resonator/notch/low loss impedance element)	Kongsberg Space	3502/002



Source: Kongsberg Norspace

DIODES

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Bipolar PN		
369	Types BYV, BYW, STTH	ST Microelectronics	5101-5103/... (8)
	Schottky		
368 Rev 1	Types 1N5819U, 1N5822U, STPS	ST Microelectronics	5106/016-...-024 (8)
	RF/Microwave, Silicon Schottky		
227 J	Types BAS 40, BAS 70, BXY43, BXY44	Infineon Technologies AG	5512-5513/... (3)
	RF/Microwave, Varactors		
225 J	Multiplier and PIN, DH 2xx, DH 50xxx, DH76xxx	Cobham Microwave	5512-5513/...(9)



LCC2B_510101311
Source: STMicroelectronics



M208A
Source: Cobham Microwave

FUSES

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Thin film		
284 F	Type MGA-S	Schurter	4008/001
336 C	Type HCSF	Schurter	4008/002



Type HCSF
Source: Schurter AG

INDUCTORS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Fixed, RF		
241 K	Types MSC1 10K, 12K, 20K and H01	Exxelia SAS	3201/008
	Power		
276 H	Types SESI and CMC	Exxelia SAS	3201/009-010



SESI
Source: Exxelia Magnetics



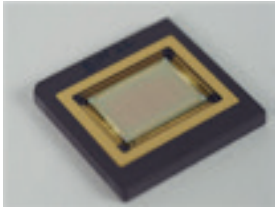
FLAT-16_M54HC4040KT
Source: ST Microelectronics



SAMRH71
Source: Microchip



SPPL12420RH
Source: Space IC



NG-Medium
Source: NanoXplore



Latching relay, T05
Source: REL STPI

MICROCIRCUITS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Digital C-MOS		
073 T	4000 B Series	ST Microelectronics	9201-9202-9203-9204-9205-9206-9207-9209-9306-9401-9407-9408-9409/... [62]
190 P	54HC and 54HCT Series	ST Microelectronics	9201-9202-9203-9204-9205-9207-9208-9209-9306-9401-9402-9405-9408-/...(76)
357 A	ATC18RHA ASIC	Microchip Technology	9202-9304-9512/... [4]
359 A	ATMX150RHA ASIC	Microchip Technology	9202/083
372	ARM Cortex M7 Microcontroller	Microchip Technology	9512/006
381	Integrated Circuits, Silicon, Monolithic, CMOS Radiation Hardened 65nm ASIC Platform, based on type C65Space	ST Microelectronics	9304/010, 9202/086
382	Integrated Circuits, Silicon, Monolithic, 35KLUT Radiation-Hardened FPGA [NG-Medium]	NanoXplore	9304/010, 9202/086
	Pulse Width Modulator		
344 B	Types ST1843, ST1845	ST Microelectronics	9108/020-021
	Step Down Converter		
376	SPPL12420RH	Space IC	9102/014

RELAYS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Non-Latching		
102 K	Type T**	REL STPI	3601/002
205 H	Type E 215	REL STPI	3601/007
318 D	Type M300	LEACH Sarralbe	3601/007
	Latching		
088 L	Type TL	REL STPI	3602/002
098 K	Type EL415	REL STPI	3602/004
317 D	Type M402	LEACH Sarralbe	3602/004
167 J	Type EL215	REL STPI	3602/009
362 A	Type GP250, GP2	LEACH Sarralbe	3602/003-010

WIRES AND CABLES

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Low Frequency		
007 U	Polyimide, Types FA-3901-1, FA 3901-2	Draka Fileca	3901/001-002
009 S	Polyimide, Types 1871-1872	Nexans	3901/001-002
132 R	Polyimide, Types 3901002**B	Axon' Cable	3901/001-002
008 T	PTFE, Types MTV-BTV	Nexans	3901/013
292 F	PTFE/Polyimide, Types 3901013**B	Axon' Cable	3901/013
138 P	Polyimide, Type SPC 2110	W. L. Gore & Associates	3901/009
380	Polymide, Types SPL, SPLD	W. L. Gore & Associates	3901/019-021
268 J	Polyimide, Types 3901019**B	Axon' Cable	3901/019
159 Q	Crosslinked PTFE, Type Silver-Plated Copper	Tyco Electronics	3901/012
267 K	Crosslinked PTFE, Type Silver-Plated Copper	Axon' Cable	3901/012
215 P	PTFE, Polyimide / PFA Insulated, Type SPP	W. L. Gore & Associates	3901/017
216 N	PTFE, Polyimide / PFA Insulated, Type SPM	W. L. Gore & Associates	3901/018
374	PTFE, Polyimide / PFA Insulated, Types 3901-018, -019, -021	Bizlink Special	3901/018-...-021 (3)
300 F	PTFE, Polyimide / PFA Insulated, Type SPM	Axon' Cable	3901/018
293 F	Polyimide, Insulated, Shielded, Drain Wire, Types 3901021**B	Axon' Cable	3901/021
257 K	Crosslinked, Modified ETFE, Type Silver-Plated Copper, Lightweight	Tyco Electronics	3901/020-022
299 F	Fluoropolymer, Lightweight, Based on Type CSWL	Axon' Cable	3901/024
305 E	Fluoropolymer, Lightweight, Based on Type CSWL	W. L. Gore & Associates	3901/024
328 D	Extra Thin, Fluorthermoplastic / Polyimide, based on Type CSC	W. L. Gore & Associates	3901/025
373	Fluoropolymer, Lightweight, Based on Type LEW	W. L. Gore & Associates	3901/026
	Coaxial, RF, Flexible		
024 U	PTFE/Polyimide, Type 50 CIS	Nexans	3902/001
255 M	Coaxial, Triaxial, Balanced Shielded Line	W. L. Gore & Associates	3902/002
298 F	Coaxial, Triaxial, Balanced Shielded Line	Axon' Cable	3902/002
291 F	Symmetric, Quad, Spacewire	Axon' Cable	3902/003
304 E	Symmetric, Quad, Spacewire	W. L. Gore & Associates	3902/003
335 C	Symmetric, Quad, Spacewire	Axon' Cable	3902/004



ESA Cables
Source: Draka Felica



Axon Cables
Source: Axon' Cable



QS Space Grade
Source: Leoni



Single Core Construction
Source: Tyco Electronics



ESCC 3901/025
Source: W.L. GORE & ASSOCIATES GmbH



8S-SMA
Source: W. L. Gore & Associates



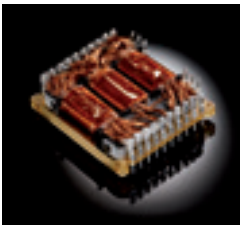
Mini-AVIM
Source: Diamond

CABLE ASSEMBLY

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	RF Cable Assemblies		
348 A	Type TNC-VHP	Radiall	3408/001
358 A	Type 8S-SMA	W. L. Gore & Associates	3408/002
365	Type Axowave SL34SQ	Axon' Cable	3408/003
	Optical Cable Assemblies		
355 A	Type mini AVIM	Diamond	3420/001

TRANSFORMERS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	TO and CCM		
356 A	Molded SMD. Types TO, CCM	Exxelia SAS	3201/011-012
	Custom magnetics		
364 A	Inductors, Chokes and Transformers	Flux A/S	3201/013



Custom Magnetic
Source: Flux A/S

THERMOSTATS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Switches		
275 H	Thermostatic, Bimetallic	COMEPA	3702/001-002



Switches T45
Source: COMEPA

RF PASSIVE

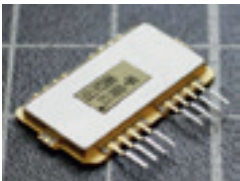
Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Attenuator and Load		
185 L	Coaxial Loads, Type R404	Radiall	3403/004-...-009 (3)
178 M	Attenuators, Type R413	Radiall	3403/005-008



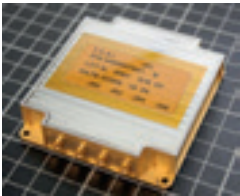
Attenuators, SMA DC-22GHz
Source: Radiall

PROCESS CAPABILITY APPROVAL
(Certification)

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Hermetic Hybrid		
332 C	High Frequency Hybrid Line	Thales Alenia Space France	2566000
343 C	Thick and Thin film low frequency and LTCC microwave hybrid line	Thales Alenia Space Italy	2566000
345 B	Thick Film, Hermetic Hybrids and HTCC Hermetic Hybrids	Airbus Defence and Space France	2566000
346 A	Thick Film, Hermetic and HTCC Hermetic Low Power, single cavity Hybrids	Safran Electronics and Defence	2566000
349 A	Hermetic Hybrid Line	Thales Alenia Space Belgium	2566000
341 C	Microwave Hybrid Integrated Circuits (MHIC) and High Density Integrated (HDI) RF Systems in Package (RF-SiP) using LTCC multilayer technology	Tesat Spacecom	2566000
	Non-hermetic Modules		
351 B	3D Staking Technology Modules	3D Plus	2566001
	Assembly and Test House (ATH)		
379	Hermetically Encapsulated Discrete	First Sensor Lewicki	2567000
	Semiconductor Components in SMD and TO Packages		



RF Hybrids
Source: TAS France



TAS-I Hybrid
Source: ESA



MHIC
Source: Tesat

THERMISTORS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	NTC		
266 K rev 1	Types G15K4D489 and *K3A35*	TE Connectivity (Betatherm)	4006/013-014
	PT		
352 B	Type PTC	Innovative Sensor Technology	4006/015



ESCC 4006/014
Source: TE Connectivity



Thin film/Platinum Sensor, PTC
Source: IST



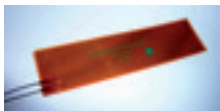
SMx -FAMILY
Source: Isabellenhütte



MS1
Source: Vishay Electronic



Flexible foil heaters
Source: IRCA



MINCO 14490j
Source: Minco

RESISTORS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Shunts		
285 F	Types SMV-PW and SM*-PT	Isabellenhütte	4001/027-028
	Fixed, Film		
256 L	Surface Mount, Type MS1	Vishay Electronic GmbH	4001/022
289 F	Surface Mount, Type TNPS	Vishay Electronic GmbH	4001/029
	Chip		
287 G	Type PHR; PFRR; PRAHR/CNWHR	Vishay S.A., Sfernice	4001/023-025
314 E	Type CHP	Vishay S.A., Sfernice	4001/026
	Flexible, Foil, Heaters		
184 P	Single & Double Layer	IRCA	4009/002
325 D	Single & Double Layer	Minco	4009/003
330 D	Single & Double Layer	IRCA	4009/004

TRANSISTORS

Cert.	Type Designation	Manufacturer	Detail Specifications (quantity)
	Bipolar NPN, PNP, NPN/PNP		
361 A	Low and High Power	ST Microelectronics	5201-5202-5203-5204-5207/... (14)
	MOSFET, Power, N-Channel		
303 E	Types STRH100N10, STRH40N6, STRH100N6 and STRH8N10	ST Microelectronics	5205/021-...-024 (4)
319 E	Type BUY**CS***	Infineon Technologies AG	5205/026-...-030 (4)
339 C	Type BUY 15CS	Infineon Technologies AG	5205/031
363 A	Type BUY 06CS	Infineon Technologies AG	5205/032
360 A	Types BUY65CS08J-01, BUY65CS28A-01	Infineon Technologies AG	5205/033
	MOSFET, Power, P-Channel		
326 D	Types STRH40P10, STRH12P10	ST Microelectronics	5205/025-029
	RF/Microwave, NPN, Low Power, Low Noise		
230 K	Type BFY193	Infineon Technologies AG	5611/006
245 K	Type BFY405	Infineon Technologies AG	5611/008
322 E	Types BFY640, 640B, 650B, 740B	Infineon Technologies AG	5611/009-...-011 (3)



25CS54AR
Source: Infineon Technologies AG



ST Microelectronics Power Mosfet
Source: ESA



<https://escies.org> website offers you our full list of Qualified Manufacturers, the Qualified Parts List, all ESCC Specifications, the ESA Radiation Database, the European Preferred Parts List, ESA Components Technology Activities, Component Conference announcements and proceedings and MUCH MORE.

Contact

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