


<p align="center"><b>APPROVED</b></p>  <p align="center">(For DTC Use Only)</p>		License is hereby granted to the applicant for the described commodity to be permanently exported from the United States. This license may be revoked, suspended or amended by the Secretary of State without prior notice whenever the Secretary deems such action advisable.	
		UNITED STATES OF AMERICA DEPARTMENT OF STATE APPLICATION/LICENSE FOR PERMANENT EXPORT OF UNCLASSIFIED DEFENSE ARTICLES AND RELATED UNCLASSIFIED TECHNICAL DATA	
1. Date Prepared 01/10/2013	2. PM/DDTC Applicant/Registrant Code FRANCE	3. Country of Ultimate Destination Los Angeles	4. Probable Port of Exit from U.S.
5. Applicant's Name, Address, ZIP Code, Telephone Number			
6. Name, agency and telephone of U.S. Government personnel (not PM/DDTC) familiar with the commodity.			
7. Name and telephone numbers of applicant contact if U.S. Government needs additional information.			

License No: 050428948 License Valid For 48 Months From Above Date Issued : 01/30/2013	Date Months From Above
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8. Description of Transaction:		A. This application represents ONLY completely new shipment	
B. This Application has related license no(s) _____		<input checked="" type="checkbox"/> was licensed to the country in Block 3 of the first page under license no(s) 050417535 _____ was licensed to other countries under license no (s). _____ was returned without action under voided license no (s). _____ was denied to the country in Block 3 of the first page under voided license(s)	
C. This Application is in reference to agreement no(s) _____		D. If the commodity is being financed under: <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Foreign Military Sale <input type="checkbox"/> Foreign Military Financing <input type="checkbox"/> Grant Aid Program	
E. Defense Trade Controls Compliance This application is related to a disclosure filed with Defense Trade Controls Compliance <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes			
Item #	9. Quantity	10. Commodity	11. USML Category Number
1	Quantity : 6 Unit Type : Pieces	Hybrd Crystal Oscillator QT188LD9S-10.000MHz MCM5841-1M 10.000MHz Identified in line item 1 of customer PO. Defense Article Type : Hardware	XV(e) Is a DSP-83 attached? No
2	Quantity :	Screening & Grp A Test Data for	XV(e)

	7	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188L9S-20.000MHz; MCM5855-1M 20.000 MHz Identified in line item 2 of customer PO.	XV(e) Is a DSP-83 attached? No
	6	Quantity : 1 Unit Type : Lots	Screening & Grp A Test Data for QT188L9S-20.000MHz; MCM5855-1M 20.000 MHz-BotM traceability (incl manuf,p/n,d/c,watere#,receiving info):Oscillator traceability (pre & post seal/serial# log):Crystal CoC:Manuf traveler;Screen test traveler;Screen elec test data (pre burn-in,final elec):Radiographic negatives;Radiographic CoC:-Freq aging test data;Grp A inspection test traveler;Grp A elec test data. Identified in line item 2 of customer PO. Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No
	5	Quantity : 7 Unit Type : Pieces	Hybrid Crystal Oscillator QT188L9S-20.000MHz MCM5855-1M 20.000MHz Identified in line item 2 of customer PO. Defense Article Type : Hardware	XV(e) Is a DSP-83 attached? No
	4	Quantity : 1 Unit Type : Lots	Precrystal Mount (Customer Source Inspection) Data for QT188LD9S-10.000MHz-MCM5841-1M 10.000MHz Identified in line item 1 of customer PO. Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No
	3	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188LD9S-10.000MHz-MCM5841-1M 10.000MHz Identified in line item 1 of customer PO. Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No
		Quantity : 1 Unit Type : Lots	QT188LD9S-10.000MHz; MCM5841-1M 10.000 MHz-BotM traceability (incl manuf,p/n,d/c,watere#,receiving info):Oscillator traceability (pre & post seal/serial# log):Crystal CoC:Manuf traveler;Screen test traveler;Screen elec test data (pre burn-in,final elec):Radiographic negatives;Radiographic CoC:-Freq aging test data;Grp A inspection test traveler;Grp A elec test data. Identified in line item 1 of customer PO. Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No

		Defense Article Type : Technical Data			
	Quantity : 1 Unit Type : Lots	Pre-crystal mount (Customer Source Inspection) Data for QT188L9S-20.000MHz; MCM5855-1M 20.000 MHz Identified in line item 2 of customer PO.	XV(e)	Is a DSP-83 attached? No	
8	Quantity : 1 Unit Type : Lots	Hybrid Crystal Oscillator QT188HCD10S-4.000MHz MCM5843-2M 4.000MHz Identified in line item 3 of customer PO.	XV(e)	Is a DSP-83 attached? No	
9	Quantity : 10 Unit Type : Pieces	Defense Article Type : Hardware			
	Quantity : 1 Unit Type : Lots	Screening & Grp A Test Data for QT188HCD10S-4.000MHz; MCM5843-2M 4.000MHz-BotM traceability (incl manuf/p/n/d/c/water#;receiving info);Oscillator traceability (pre & post seal/serial# log);Crystal CoC;Manuf traveler;Screen test traveler;Screen elec test data (pre burn-in,final elec);Radiographic negatives;Radiographic CoC;-Freq aging test data;Grp A inspection test traveler;Grp A elec test data. Identified in line item 3 of customer PO.	XV(e)	Is a DSP-83 attached? No	
10	Quantity : 1 Unit Type : Lots	Defense Article Type : Technical Data			
	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188HCD10S-4.000MHz; MCM5843-2M 4.000MHz Identified in line item 3 of customer PO.	XV(e)	Is a DSP-83 attached? No	
11	Quantity : 1 Unit Type : Lots	Defense Article Type : Technical Data			
	Quantity : 1 Unit Type : Lots	Pre-Crystal Mount (Customer Source Inspection) Data for QT188HCD10S-4.000MHz; MCM5843-2M 4.000MHz Identified in line item 3 of customer PO.	XV(e)	Is a DSP-83 attached? No	
12	Quantity : 1 Unit Type : Lots	Defense Article Type : Technical Data			
	Quantity : 10 Unit Type : Pieces	Defense Article Type : customer PO.			
13	Quantity : 10 Unit Type : Pieces	Hybrid Crystal Oscillator QT188LD10S-48.000MHz MCM5841-2M 48.000MHz Identified in line item 4 of customer PO.	XV(e)	Is a DSP-83 attached? No	

		Hardware			
14	Quantity : 1 Unit Type : Lots	Screening & Grp A Test Data for QT188LD10S-48.000MHz; MCM5841-2M 48.000MHz-BotM traceability (incl manuf,p/n,d/c,water#,receiving info);Oscillator traceability (pre & post seal/serial# log);Crystal CoFC;Manuf travel;Screen test travel;Screen elec negatives;Radiographic CoFC;-Freq aging test data;Grp A inspection test travel;Grp A elec test data. Identified in line item 4 of customer PO.	Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No	
15	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188LD10S-48.000MHz; MCM5841-2M 48.000MHz Identified in line item 4 of customer PO.	Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No	
16	Quantity : 1 Unit Type : Lots	Pre-Crystal Mount (Customer Source Inspection) Data for QT188LD10S-48.000MHz; MCM5841-2M 48.000MHz Identified in line item 4 of customer PO.	Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No	
17	Quantity : 5 Unit Type : Pieces	Hybrd Crystal Oscillator QT188LD9S-1.000MHz MCM5841-5M 1.000MHz Identified in line item 5 of customer PO.	Defense Article Type : Hardware	XV(e) Is a DSP-83 attached? No	
18	Quantity : 1 Unit Type : Lots	Screening & Grp A Test Data for QT188LD9S-1.000MHz MCM5841-5M 1.000MHz-BotM traceability (incl manuf,p/n,d/c,water#,receiving info);Oscillator traceability (pre & post seal/serial# log);Crystal CoFC;Manuf travel;Screen test travel;Screen elec negatives;Radiographic CoFC;-Freq aging test data;Grp A inspection test travel;Grp A elec test data. Identified in line item 5 of customer PO.	Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No	

19	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188LD9S-1.000MHz MCM5841-5M 1.000MHz Identified in line item 5 of customer PO. Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No
20	Quantity : 1 Unit Type : Lots	Pre-Crystal Mount (Customer Source Inspection) Data for QT188LD9S-1.000MHz MCM5841-5M 1.000MHz Identified in line item 5 of customer PO. Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No
21	Quantity : 6 Unit Type : Pieces	Hybrid Crystal Oscillator QT188LD9S-120.000MHz MCM5841-4M 120.000MHz Identified in line item 6 of customer PO. Defense Article Type : Hardware	XV(e) Is a DSP-83 attached? No
22	Quantity : 6 Unit Type : Pieces	Hybrid Crystal Oscillator QT188LD9S-120.000MHz MCM5841-4M 120.000MHz Destructive Samples Identified in line item 6 of customer PO. Defense Article Type : Hardware	XV(e) Is a DSP-83 attached? No
23	Quantity : 1 Unit Type : Lots	Group C Inspection for QT188LD9S-120.000MHz, MCM5841-4M 120.000MHz Identified in line item 6 of customer PO. Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No
24	Quantity : 1 Unit Type : Lots	Group D Inspection for QT188LD9S-120.000MHz, MCM5841-4M 120.000MHz Identified in line item 6 of customer PO. Defense Article Type : Technical Data	XV(e) Is a DSP-83 attached? No
25	Quantity : 1 Unit Type : Lots	Screening & Grp A,C,D Test Data for QT188LD9S-120.000MHz, MCM5841-4M 120.000MHz:Bottom traceability (incl manuf,p/n,d/c,watfer#,receiving info);Oscillator traceability (pre & post seal/serial# log);Crystal Co/C;Manuf traveler;Screen test traveler;Screen elec test data (pre burn-in,final elec);Radioographic negatives;Radiographic Co/C;-Freq aging test data;Grp A,C,D insp test traveler;Grp A,C,D elec test	XV(e) Is a DSP-83 attached? No



		Defense Article Type : Technical Data							
26	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188LD9S-120.000MHz, MCM5841-4M 120.000MHz Identified in line item 6 of customer PO.	Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No				
27	Quantity : 1 Unit Type : Lots	Pre-Crystal Mount (Customer Source Inspection) Data for QT188LD9S-120.000MHz, MCM5841-4M 120.000MHz Identified in line item 6 of customer PO.	Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No				
28	Quantity : 6 Unit Type : Pieces	Hybrid Crystal Oscillator QT188LD9S-48.000MHz MCM5841-2M 48.000MHz Identified in line item 7 of customer PO.	Defense Article Type : Hardware	XV(e)	Is a DSP-83 attached? No				
29	Quantity : 1 Unit Type : Lots	Screening & Grp A Test Data for QT188LD9S-48.000MHz, MCM5841-2M 48.000MHz: BoM traceability (incl manu/p/n,d/c,watser#,receiving info);Oscillator traceability (pre & post seal/serial# log);Crystal CoC;Manuf traveler;Screen test traveler;Screen elec test data (pre burn-in,final elec);Radiographic negatives;Radiographic CoC;-Freq aging test data;Grp A inspection test traveler;Grp A elec test data. Identified in line item 7 of customer PO.	Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No				
30	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188LD9S-48.000MHz, MCM5841-2M 48.000MHz Identified in line item 7 of customer PO.	Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No				
31	Quantity : 1 Unit Type : Lots	Pre-Crystal Mount (Customer Source Inspection) Data for QT188LD9S-48.000MHz, MCM5841-2M 48.000MHz Identified in line item 7 of customer PO.	Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No				

		Defense Article Type : Technical Data			
32	Quantity : 4	Unit Type : Pieces	Hybrid Crystal Oscillator QT188HCD9S-1.800MHz MCM5843-1M 1.800MHz Identified in line item 8 of customer PO.	XV(e)	Is a DSP-83 attached? No
33	Quantity : 5	Unit Type : Pieces	Hybrid Crystal Oscillator QT188HCD9S-1.800MHz MCM5843-1M 1.800MHz Destructive samples Identified in line item 8 of customer PO.	XV(e)	Is a DSP-83 attached? No
34	Quantity : 1	Unit Type : Lots	Group C Inspection for QT188HCD9S-1.800MHz MCM5843-1M 1.800MHz Identified in line item 8 of customer PO.	XV(e)	Is a DSP-83 attached? No
35	Quantity : 1	Unit Type : Lots	Screening & Grp A and C Test Data for QT188HCD9S-1.800MHz MCM5843-1M 1.800MHz: Both traceability (incl manuf,p/n,d/c,watfer#,receiving info);Oscillator traceability (pre & post seal/serial# log);Crystal CoFC;Manuf traveler;Screen test traveler;Screen elec test data (pre burn-in,final elec);Radiographic negatives;Radiographic CoFC;-Freq aging test data;Grp A,C inspection test traveler;Grp A,C elec test data. Identified in line item 8 of customer PO.	XV(e)	Is a DSP-83 attached? No
36	Quantity : 1	Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188HCD9S-1.800MHz MCM5843-1M 1.800MHz Identified in line item 8 of customer PO.	XV(e)	Is a DSP-83 attached? No
37	Quantity : 1	Unit Type : Lots	Pre-Crystal Mount (Customer Source Inspection) Data for QT188HCD9S-1.800MHz MCM5843-1M 1.800MHz Identified in line item 8 of customer PO. Inspection to be done by Source Surveillance Services, Inc. (SSSI)	XV(e)	Is a DSP-83 attached? No



		Technical Data			
38	Quantity : 6 Unit Type : Pieces	Hybrid Crystal Oscillator QT188LD9S-100.000MHz MCM5841-3M 100.000MHz Identified in line item 9 of customer PO.	Defense Article Type :  Hardware	XV(e)	Is a DSP-83 attached? No
39	Quantity : 1 Unit Type : Lots	Screening/Grp A Test Data for QT188LD9S-100.000MHz MCM5841-3M 100.000MHz: BoftM traceability (manuf, p/n,d/c,waterr#;receiving info); Oscillator traceability (pre & post seal/serial# log);Crystal CoIC; Manuf traveler;Screen test traveler; Screen elec test data(pre burn-in-final;Radiographic negatives;Radiographic CoIC;Freq aging test data;Grp A insp test traveler;Grp A elec test data. Identified in line 9 of customer PO	Defense Article Type :  Technical Data	XV(e)	Is a DSP-83 attached? No
40	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188LD9S-100.000MHz MCM5841-3M 100.000MHz Identified in line item 9 of customer PO.	Defense Article Type :  Technical Data	XV(e)	Is a DSP-83 attached? No
41	Quantity : 1 Unit Type : Lots	Pre-Crystal Mount Source Inspection Data for QT188L9S-100.000MHz MCM5841-3M 100.000MHz Identified in line item 9 of customer PO.	Defense Article Type :  Technical Data	XV(e)	Is a DSP-83 attached? No
42	Quantity : 5 Unit Type : Pieces	Hybrid Crystal Oscillator QT188LD9S-20.000MHz MCM5841-7M 20.000MHz Identified in line item 10 of customer PO.	Defense Article Type :  Hardware	XV(e)	Is a DSP-83 attached? No
43	Quantity : 1 Unit Type : Lots	Screening & Grp A Test Data for QT188LD9S-20.000MHz MCM5841-7M 20.000MHz: BoftM traceability (incl manuf,p/n,d/c,waterr#;receiving info);Oscillator traceability (pre & post seal/serial# log);Crystal CoIC;Manuf traveler;Screen test traveler;Screen elec test data (pre burn-in-final elec);Radiographic negatives;Radiographic CoIC;-Freq aging test data;Grp A inspection test		XV(e)	Is a DSP-83 attached? No

		Defense Article Type : Technical Data					
		traveler;Grp A elec test data. Identified in line item 10 of customer PO.					
44	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188LD9S-20.000MHz MCM5841-7M 20.000MHz Identified in line item 10 of customer PO.	Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No		
45	Quantity : 1 Unit Type : Lots	Pre-Crystal Mount Source Inspection Data for QT188LD9S-20.000MHz MCM5841-7M 20.000MHz Identified in line item 10 of customer PO.	Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No		
46	Quantity : 6 Unit Type : Pieces	Hybrid Crystal Oscillator QT178HCD9S - 250.000kHz MCM5856-1M 250.000kHz Identified in line item 11 of customer PO.	Defense Article Type : Hardware	XV(e)	Is a DSP-83 attached? No		
47	Quantity : 6 Unit Type : Pieces	Hybrid Crystal Oscillator QT178HCD9S - 250.000kHz MCM5856-1M 250.000kHz Destructive Samples Identified in line item 11 of customer PO.	Defense Article Type : Hardware	XV(e)	Is a DSP-83 attached? No		
48	Quantity : 1 Unit Type : Lots	Group A,C,D Test Data-QT178HCD9S-250.000kHz MCM5856-1M 250.000kHz - BotM traceability (manuf, p/n, d/c, water#,receiving info); Oscillator traceability (pre & post seal/ serial# log);Crystal Co/C; Manuf traveler; Screen test traveler; Screen elec test data (pre burn-in,final elec);Radiographic negatives;Radiographic Co/C;-Freq aging test data;Grp A,C,D insp test traveler;Grp A,C,D elec test data. Identified in line item 11 of customer PO.	Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No		
49	Quantity : 1 Unit Type : Lots	Group C Inspection Data for QT178HCD9S-250.000kHz MCM5856-1M 250.000kHz (Group C Inspection Test Traveler; Group C Radiographic Inspection Negatives; Group C		XV(e)	Is a DSP-83 attached? No		

		Defense Article Type : Technical Data 1 of customer PO. Radiographic Inspection (CoC) Identified in line item		
50	Quantity : 1 Unit Type : Lots	Group D Inspection Data (incl Group D Inspection Test Traveler) for QT178HCD9S-250.000kHz MCM5856-1M 250.000kHz Identified in line item 11 of customer PO. Defense Article Type : Technical Data		
51	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data or QT178HCD9S-250.000kHz MCM5856-1M 250.000kHz Identified in line item 11 of customer PO. Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No
52	Quantity : 1 Unit Type : Lots	Pre-Crystal Mount Source Inspection Data for QT178HCD9S-250.000kHz MCM5856-1M 250.000kHz Identified in line item 11 of customer PO. Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No
53	Quantity : 5 Unit Type : Pieces	Hybrid Crystal Oscillator QT188L9S-50.000MHz MCM5855-2M 50.000MHz Identified in line item 12 of customer PO. Defense Article Type : Hardware	XV(e)	Is a DSP-83 attached? No
54	Quantity : 1 Unit Type : Lots	Screening & Grp A Test Data for QT188L9S-50.000MHz MCM5855-2M 50.000MHz: BoM traceability (incl manuf,p/n,d/c,water#,receiving info);Oscillator traceability (pre & post seal/serial# log);Crystal CoC;Manuf traveler;Screen test traveler;Screen elec test data (pre burn-in,final elec);Radiographic negatives;Radiographic CoC;-Freq aging test data;Grp A inspection test traveler;Grp A elec test data. Identified in line item 12 of customer PO. Defense Article Type : Technical Data	XV(e)	Is a DSP-83 attached? No
55	Quantity : 1	BuyOff Service (Customer Final Source Inspection) Data for QT188L9S-50.000MHz MCM5855-2M	XV(e)	

61	Quantity : 1 Unit Type : Lots	Technical discussions related to line items 1-60	Defense Article Type : Technical Data	Is a DSP-83 attached? No	XV(e)
60	Quantity : 1 Unit Type : Lots	Pre-Crystal Mount Source Inspection Data for for QT188HCD9S-1.000 MHz, MCM5843-4M 1.000 MHz. Identified in line item 13 of customer PO.	Defense Article Type : Technical Data	Is a DSP-83 attached? No	XV(e)
59	Quantity : 1 Unit Type : Lots	BuyOff Service (Customer Final Source Inspection) Data for QT188HCD9S-1.000 MHz, MCM5843-4M 1.000 MHz. Identified in line item 13 of customer PO.	Defense Article Type : Technical Data	Is a DSP-83 attached? No	XV(e)
58	Quantity : 1 Unit Type : Lots	Screening & Grp A Test Data for QT188HCD9S-1.000MHz MCM5843-4M 1.000MHz: BotM traceability (incl manu/p/n/d/c/water#,receiving info);Oscillator traceability (pre & post seal/serial# log);Crystal CoF;Manu't traveler;Screen test traveler;Screen elec test data (pre burn-in,final elec);Radiographic negatives;Radiographic CoF;-Freq aging test data;Grp A inspection test traveler;Grp A elec test data. Identified in line item 13 of customer PO.	Defense Article Type : Technical Data	Is a DSP-83 attached? No	XV(e)
57	Quantity : 5 Unit Type : Pieces	Hybrd Crystal Oscillator QT188HCD9S-1.000MHz MCM5843-4M 1.000MHz Identified in line item 13 of customer PO.	Defense Article Type : Hardware	Is a DSP-83 attached? No	XV(e)
56	Quantity : 1 Unit Type : Lots	Pre-Crystal Mount Source Inspection Data for for QT188L9S-50.000MHz MCM5855-2M 50.000MHz Identified in line item 12 of customer PO.	Defense Article Type : Technical Data	Is a DSP-83 attached? No	XV(e)
	Unit Type : Lots	50.000MHz Identified in line item 12 of customer PO.	Defense Article Type : Technical Data	Is a DSP-83 attached? No	

13. TOTAL VALUE(Sum of All Pages)	\$138,222	
<p>14. Name and address of foreign end-user</p> <p>ESA-European Space Agency</p> <p>8-10 Mario Nikkis</p> <p>75738 Paris Cedex 15</p> <p>FR</p>		
<p>15. Manufacturer of Commodity</p> <p>Q-TECH Corporation</p> <p>10150 Jefferson Boulevard</p> <p>Culver City, CA 90023 US</p>		
<p>16. Name and address of foreign consignee</p> <p>ESA-European Space Agency</p> <p>Keplerlaan 1</p> <p>2200 AZ Noordwijk</p> <p>NL</p> <p>Alter Technology TUV Nord S.A.U.</p> <p>Tomas Alba Edison 4</p> <p>PCT Cartuja 93, 41092 Sevilla</p> <p>SP</p> <p>Instituto de Astrofisica de Andalucia (IAA-CSIC)</p> <p>Glorieta de la Astronomia, s/n, E-18008</p> <p>Granada</p> <p>SP</p> <p>Universidad de Alcala de Henares Departamento de Automatica</p> <p>Campus Universitario (Edificio Politecnico)</p> <p>Alcala de Henares Madrid</p> <p>SP</p>		

<p>           Institut fuer Experimentelle und Angewandte Physik, University of Kiel            Leibnizstrasse 11            D-24118 Kiel            GM         </p> <p>           TU Braunschweig, Institute of Computer Network Engineering            Hans Sommer Str. 66            38106 Braunschweig            GM         </p> <p>           Max Planck Institute for Solar System Research            Max-Planck-Strasse 2            37191 Katlenburg-Lindau            GM         </p> <p>           Universitat de Barcelona, Dept. Electronica            Marti I Franques a1, 2nd Floor            E08028 Barcelona            SP         </p> <p>           Grupo de Astronomia y Ciencias del Espacio, Universidad de Valencia (GACE/UV)            c/ Catedratico Jose Beltran, no 2            E46980 Paterna (Valencia)            SP         </p> <p>           RAL - Rutherford Appleton Laboratory            Harwell Oxford            Didcot OX11 0QX            UK         </p> <p>           Institut d'astrophysique Spatiale            Bat 121, Universite Paris-Sud            91405 Orsay Cedex            FR         </p>	<p> <b>17. Source of Commodity</b>            Q-TECH Corporation            10150 Jefferson Boulevard         </p>
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Culver City, CA 90023 US	<p>18. Name and address of foreign intermediate consignee</p> <p>NTE-SENER</p> <p>C/Sabaters, 1 - Parc Tecnologic del Valles 08290 Cerdanyola del Valles</p> <p>Barcelona</p> <p>SP</p> <p>Components del, PCB assem, AMHD func test; E-Unit integration, func,accept tests. CT-Camera Assembly and ISS functional tests.</p> <p>Instituto de Astrofisica de Andalucia (IAA-CSIC)</p> <p>Glorieta de la Astronomia s/n</p> <p>18008 Granada</p> <p>SP</p> <p>AHMD functional tests; E-Unit integration and functional tests; Integration at subsystem level (electronic box)</p> <p>Gener Madrid</p> <p>Severo Ochoa 4 - Parque Tecnologico de Madrid 28760</p> <p>Tres Cantos (Madrid)</p> <p>SP</p> <p>E-Unit integration, functional, vibration, thermal, EMC and acceptance tests. CT-Camera Assembly and ISS functional tests.</p> <p>INTA Carretera de Ajalvir, km4</p> <p>28850 Torrejon de Ardoz</p> <p>Madrid</p> <p>SP</p> <p>E-Unit vibration and thermal tests; E-Unit EMC test</p> <p>Max-Planck Institute</p> <p>Max-Planck-Str. 2, 37191 Katlenburg</p> <p>Lindau</p> <p>GM</p> <p>Integration into PHL; Integration into METIS</p> <p>Max-Planck Institute</p> <p>Justus-von-Liebig-Weg 3</p>
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37077 Göttingen  
 GM  
 Integration into PHI at MPS  
 Max-Planck Institute  
 Giessebachstrasse  
 85748 Garching  
 GM  
 Vibration tests  
 IABG  
 Robert Hooke-Str. 7  
 28359 Bremen  
 GM  
 Vibration tests  
 IABG  
 Einsteinstrasse 20  
 85521 Ottobrunn  
 GM  
 EMC tests; Magnetic tests; Environmental tests; Vibration tests  
 ESTEC  
 Keplerlaan 1  
 2200 AG Noordwijk  
 NL  
 EMC tests; Vacuum test  
 Astrium UK  
 Gunnels Wood Road  
 Stevenage, Hertfordshire SG1 2AS  
 UK  
 Integration on the spacecraft  
 UPS  
 Parcela B-4 Poligono San Nicolas  
 41500 Alcala de Guadaira, Sevilla  
 SP

Freight forwarder  
TNT

Avda de Bruselas, 6 Alcobendas (Pol. Ind)  
28108 Madrid

SP

Freight forwarder

Fedex

Centro de Carga Aerea Madrid

28042 Madrid

SP

Freight forwarder

DHL

C/Rumania 4

Costada, Madrid

SP

Freight forwarder

Transnatur

C/Luxemburgo, 1 Centro de Transportes Costada

Madrid

SP

Freight forwarder

Ariane 5 Launch Vehicle

Centre Spatial Guyanais

Kourou

FG

Launch site - CSG launch provider

CRISA

C/Torres Quevedo 9 (P.T.M.)

28760 Tres Cantos, Madrid

SP

Components delivery and functional tests.

Universidad de Alcalá de Henares

Plaza de San Diego  
28801 Alcala de Henares, Madrid  
SP  
Investigation; EPD consortium PI institution  
Institut für Experimentelle und Angewandte Physik, The Extra Terrestrial Physics Group, Christian  
Albrechts University  
IEAP/ET CAU, Leibnizstrasse 19  
24118 Kiel  
GM  
Integration into EPD  
Kayser Threde GmbH  
Wolfratshausen Strasse 48  
81379 München  
GM  
Population PCBs  
HIMAC  
4-9-1 Anagawa, Inage Ward, Chiba  
Chiba Prefecture  
JA  
Calibration Facilities  
Physikalisch Technische Bundesanstalt - PTB  
Bundesallee 100  
38116 Braunschweig  
GM  
Calibration Facilities  
Technische Universität Braunschweig-Institut für Datentechnik und Kommunikations-Netze  
(Institute of Computer and Network Engineering)Hans Sommer Str. 66  
38106 Braunschweig  
GM  
Parts reception, assembly and verification  
Rockwell Collins Deutschland GmbH  
Grenzhoefter Weg 36

69123 Heidelberg

GM

Parts assembly and verification

DLR (German Aerospace Center)

Robert Hooke-Strasse 7

28359 Bremen

GM

Vibration tests

Istituto Nazionale di Astrofisica - Institute of Space Astrophysics and Cosmic Physics (IASF-Milano)

Via Edoardo Bassini 15

20133 Milano

IT

Testing

Thales Alenia Space Italia S.p.A. (TAS-I)

Strada Antica di Collegno 253

10146 Turin

IT

Testing

University of Padova, Department of Information Engineering (DEI)

Via Gradenigo, 6/B

35131 Padova

IT

Calibration and system level testing

National Council of Research/Photonics and Nanotechnologies Institute (NCR/IFN-LUXOR)

Via Trasea 7

Padova

IT

Calibration

Istituto Nazionale di Astrofisica - Osservatorio Astronomico di Torino (INAF-OAT)

Via Osservatorio 20

Pino Torinese

IT

System level calibration (AIV and AIT)

Dipartimento di Fisica E Astronomia, Università di Firenze (DFA-UF)

Via Sansone 1

50019 Sesto Fiorentino

IT

System level testing

Italian Space Agency (ASI-Agenzia Spaziale Italiana) Unità Esplorazione e Osservazione dell'Universo

Viale Liegi 26

00198 Roma

IT

National funding agency

Departamento de Electronica, Facultad de Fisica, Universidad de Barcelona (UB)

Martí I Franques 1, Planta 2

080208 Barcelona

SP

Controller functional tests; CT-Camera Assembly and ISS functional tests

Kiepenheuer-Institut für Sonnenphysik

Zähringer Str. 40

79108 Freiburg

GM

CT-Camera Assembly and ISS functional tests

Grupo de Astronomía y Ciencias del Espacio, Universidad de Valencia (GACE/UV)

c/ Catedrático Jose Beltrán No 2

E45980 Paterna (Valencia)

SP

PCM functional tests

EREMS

Chemin de la Madelaine - Z.I.

31130 Flourens

FR

Component report on electronic PCB

Institut d'Astrophysique Spatiale



<p>Bat 121; Université Paris Sud 91405 Orsay Cedex FR Vacuum and thermal test at subsystem level</p>	<p><b>19. Name and address of Seller in United States</b></p> <p>Q-TECH Corporation 10150 Jefferson Boulevard Culver City, CA 90023</p>	<p><b>* 20. Specific purpose for which the material is required, including specific Program/End Item.</b></p> <p>Off-Shore procurement</p> <p>—Brokering (22 CFR § 129)</p> <p>—Request for Prior Approval (22 CFR § 126.8)</p> <p>Other <input checked="" type="checkbox"/></p> <p>Solar Orbiter mission-part of ESA Cosmic Vision science program. This mission has been studied in an assessment phase to demonstrate technical feasibility and defining the mission at systems level. Solar Orbiter will explore innermost regions of the heliosphere from high heliographic latitudes and reach a distance of 0.28 AU from the Sun and obtain an inclination of 35 degrees with respect to Sun's equator. In these areas a series of in situ and remote sensing measurements to be performed, providing first time in-situ measurements of regions so close to the Sun and provide arcsec resolution imagery. Also, the Solar Orbiter will provide the first out-of-the-ecliptic imaging and spectroscopic observations of Sun's poles. The strong link to BepiColombo through reuse of components will be outlined and specific technology development needs for the Solar Orbiter to be described. Parts (QT188LD9S-10.000MHz)-integrated in PHI-Flight Model in E-Unit &amp; AMHD (Line item 1). Parts (QT188LD9S-1.000MHz)-integrated in PHI Flight Model (Line item 17). Parts (QT188LD9S-120.000MHz)-integrated in PHI Flight Model (Line item 21). Parts (QT188HCD9S-1.800MHz)-integrated in PHI Flight Model (Line item 32). Parts (QT188LD9S-100.000MHz)-integrated in PHI in CT Camera (Line item 38). Parts (QT188LD9S-20.000MHz)-integrated in PHI-Flight Model (Line item 42). Parts (QT178CD9S-250.000kHz)-integrated in PHI in Power Converter Module (Line item 46). Parts (QT188HCD9S-1.000MHz)-integrated in PHI Flight Model (Line item 57) Polarimetric and Helioseismic Imager (PHI) is a diffraction limited, wavelength tunable, quasi-monochromatic polarisation sensitive imager to be built by a consortium that has a long-standing expertise in designing and building scientific instruments for space missions. The instrument will be developed with major contributions from institutes in Germany, Spain and France, and smaller contributions from Sweden, Norway and Switzerland. Parts (QT188LD9S-20.000MHz)-integrated in EDP: Energetic Particle Detector (Line item 5). Parts (QT188HCD10S-4.000MHz)-integrated in EDP: Energetic Particle Detector (Line item 9). Parts (QT188LD10S-48.000MHz)-integrated in EDP: Energetic Particle Detector (Line item 13) EDP will measure the composition, timing and distribution functions of suprathermal and energetic particles. Scientific topics to be addressed include the sources, acceleration mechanisms, and transport processes of these particles. Parts</p>
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<p>(Q1188L9S-48.000MHz)-integrated in METIS (Line item 28) The Multi Element Telescope for Imaging and Spectroscopy (METIS) is an inverted occultation coronagraph that will image the solar corona in three different wavelengths (visible light between 450 and 650 nm, and the two Lyman-<math>\alpha</math> lines of hydrogen and helium, H1 121.6nm and H<math>\epsilon</math> 30.4nm) by a combination of multilayer coatings and spectral bandpass filters. The visible channel also includes a polarimeter assembly to observe the linearly polarized component of the K corona. Inclusion of spectroscopic capabilities, which allows us to record spectra of the H1 and He II Lyman <math>\alpha</math> lines simultaneously at three different heights (accomplished by a multiple slit) in a 32 degree sector of the corona, is being proposed to ESA. Parts (Q1188L9S-50.000MHz) to be integrated in SPICE - (line item 53) The Spectral Imaging of the Coronal Environment (SPICE) spectrograph is an extreme ultraviolet imaging spectrograph presently under design for the Solar Orbiter mission. The SPICE spectrograph was selected as a NASA contribution to Solar Orbiter (for the EUS instrument required in the model payload) under the PI-ship of Southwest Research Institute (SwRI, Boulder, CO, USA). This instrument is designed to make observations in the far and extreme ultraviolet and will provide plasma diagnostics of the solar atmosphere where the temperature ranges from tens of thousands to several million degrees. Anticipated Launch Period - 2017</p>	<p><b>21. Name and address of consignor and/or freight forwarder in United States</b></p> <p>Atlas V401 (Launch Vehicle) Kennedy Space Center (Launch Provider) Cape Canaveral, FL 32899 DHL Worldwide 1200 South Pine Island Road, Suite 600 and all other DHL locations in the U.S.A. Plantation, FL 33324 Southwest Research Institute Role: System assembly and testing 6220 Culebra Road San Antonio, TX 78238 Sensor Sciences LLC Role: System level testing 3333 Vincent Road, Suite 103 Pleasant Hill, CA 94523</p>	<p><b>* 22. Applicant's statement</b></p> <p>I, Richard J Taylor, an empowered official (22 CFR § 120.25) or an official of a foreign government entity in the U.S., hereby apply for a license to complete the transaction above; warrant the truth of all statements made herein; and acknowledge, understand and will comply with the provisions of Title 22 CFR § 120-130, and any conditions and limitations imposed.</p> <p>I am authorized by the applicant to certify the following in compliance with 22 CFR § 126.13:</p> <p>(1) Neither the applicant, its chief executive officer, president, vice presidents, other senior officers or officials</p>
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(e.g., comptroller, treasurer, general counsel) nor any member of its board of directors is:

(a) the subject of an indictment for or has been convicted of violating any of the U.S. criminal statutes enumerated in 22 CFR § 120.27 since the effective date of the Arms Export Control Act, Public Law 94-329, 90 Stat. 729 (June 30, 1976); or

(b) ineligible to contract with, or to receive a license or other approval to import defense articles or defense services from, or to receive an export license or other approval from any agency of the U.S. Government;

(2) To the best of the applicant's knowledge, no party to the export as defined in 22 CFR § 126.7 (e) has been convicted of violating any of the U.S. criminal statutes enumerated in 22 CFR § 120.27 since the effective date of the Arms Export Control Act, Public Law 94-329, 90 Stat. 729 (June 30, 1976); or is ineligible to contract with, or to receive a license or other approval to import defense articles or defense services from, or to receive an export license or other approval from any agency of the U.S. Government; and

22 CFR § 126.13 Certification (Select one):

- ☒ a. I am authorized by the applicant to certify that the applicant and all the parties to the transaction can meet in full the conditions of 22 CFR § 126.13 as listed above.
- ☐ b. I am authorized by the applicant to certify to 22 CFR § 126.13. The applicant or one of the parties of the transaction cannot meet one or more of the conditions of 22 CFR § 126.13 as listed above. A request for an exception to policy, as described in Section 127.11 of the ITAR, is attached.
- ☐ c. I am authorized by the applicant to certify to 22 CFR § 126.13. The applicant or one of the parties of the transaction cannot meet one or more of the conditions of 22 CFR § 126.13 as listed above. However that party has met the conditions imposed by the Directorate of Defense Trade Controls in order to resume standard submission of applications, not requiring an exception to policy as described in Section 127.11 of the ITAR.
- ☐ d. I am not authorized by the applicant to certify the conditions of 22 CFR § 126.13. The applicant and all the parties to the transaction can meet in full the conditions of 22 CFR § 126.13 as listed above. Please see the attached letter from an official that is authorized by the applicant to certify to the conditions of 22 CFR § 126.13.
- ☐ e. I am not authorized by the applicant to certify the conditions of 22 CFR § 126.13. The applicant or one of the parties of the transaction cannot meet one or more of the conditions of 22 CFR § 126.13 as listed above. A request for an exception to policy, as described in Section 127.11 of the ITAR, and a letter from an official that is authorized by the applicant to certify to the conditions of 22 CFR § 126.13 are attached.
- ☐ f. I am not authorized by the applicant to certify to 22 CFR § 126.13. The applicant or one of the parties of the transaction cannot meet one or more of the conditions of 22 CFR § 126.13 as listed above. However that party has met the conditions imposed by the Directorate of Defense Trade Controls in order to resume standard submission of applications, not requiring an exception to policy as described in Section 127.11 of the ITAR. Please see the attached letter from an official that is authorized by the applicant to certify to the conditions of 22 CFR § 126.13.

Compliance with 22 CFR § 130 (Select one)

☒ This transaction does not meet the requirements of 22 CFR § 130.2.

☐ This transaction meets the requirements of 22 CFR § 130.2. The applicant or its vendors have not paid, nor

offered, nor agreed to pay, in respect of any sale for which a license or approval is requested, political contributions, fees or commissions in amounts as specified in 22 CFR § 130.9(a).

The applicant or its vendors have paid, or offered, or agreed to pay, in respect of any sale for which a license or approval is requested, political contributions, fees or commissions in amounts as specified in 22 CFR § 130.9(a). Information required under 22 CFR § 130.10 is attached.

I am not authorized by the applicant to certify the conditions of 22 CFR § 130.9(a). Please see the attached letter for such certification.

Signature :

23. License to be to: (Enter name, address and phone number)

**Conditions of Issuance**

1. This license is issued under the conditions cited in 22 CFR § 120 - 130, including the provisos as applicable, that:

A. It shall not be construed as implying U.S. Government approval or commitment to authorize future exports of any article (equipment or technical data) on the Munitions List, or a U.S. Government commitment with regard to any proposed manufacturing license or technical assistance agreements which may result from an authorized export.

B. If a license is issued for technical data only, it does not authorize the export of any hardware; if a license is issued for hardware only, it does not authorize the export of any technical data, unless specifically covered by an exemption.

The issuance of this license does not release the licensee from complying with other requirements of U.S. law and regulations.

2. The prior written approval of the Department of State must be obtained before U.S. Munitions List articles exported from the U.S. under license or other approval may be resold, diverted, transferred, transshipped, reshipped, reexported to, or used in any country, or by any end-user, other than that described on the license or other approval as the country of ultimate destination or the ultimate end-user.

**PROVISOS**

There are none.

**RETURN OF LICENSE**

This license must be returned to PM/DDTC, SA-1, 12th Floor, Directorate of Defense Trade Controls, Bureau of Political-Military Affairs, U.S. Department of State, Washington, DC 20522-0112 when: (1) the total value authorized has been shipped; (2) the applicant states that there will be no further shipments; (3) the date of expiration is reached; or (4) when requested by the Directorate of Defense Trade Controls.

**ENDORSEMENT**

Indicate below which ITEM on the face of the license is BEING EXPORTED and maintain a CONTINUING BALANCE of the remaining value:

SHIPMENT	QUANTITY	COMMODITY	SHIPMENT	SED NO.	INITIALS	PORT OF
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DATE	VALUE	EXIT/ENTRY
TOTAL AUTHORIZED VALUE :		
REMAINING BALANCE :		