



PTB - PHYSIKALISCH-TECHNISCHE

IABG

BUNDESANSTALT

EINSTEINSTRASSE 20

BRUNDESALLEE, 100

OTTOBRUNN, GERMANY, FEDERAL REP

BRAUNSCHWEIG, GERMANY, FEDERAL REP

ZARM FALTRUM-BETRIEBSGESELLSCHAFT

IBERESPACIO

C/O UNIVERSITAT BREMEN

MAGALANES, 3

AM FALTRUM

4A PLANTA

BREMEN, GERMANY, FEDERAL REP

MADRID, SPAIN

D508028

VALIDATED: APR 18 2013

EXPIRES: APR 30 2015

UNIVERSIDAD DE ALCALA

INTA

CTRA. MADRID-BARCELONA

CTRA. AJALVIR KM. 4

ALCALA DE HENARES, SPAIN

TORREJON DE ARDOZ, SPAIN

EUROPEAN SPACE AGENCY

INTERNATIONAL RECTIFIER CO. LTD.

8-10 RUE MARIO NIKIS

IR NEWPORT GOODS RECEIVING DEPT.

PARIS, FRANCE

CARDIFF ROAD, NEWPORT,

SOUTH WALES, UNITED KINGDOM

INTERNATIONAL RECTIFIER CO. LTD.

UPS

THE OBSERVATORY,

PARCELA B-4

CASTLEFIELD ROAD,

POLIGNO SAN NICOLAS

REIGATE, SURREY, UNITED KINGDOM

ALCALA DE GUADAIRA, SPAIN

TNT

FEDEX

AVDA. DE BRUSELAS 6

CENTRO DE CARGA AEREA

ALCOBENDAS

MADRID, SPAIN

MADRID, SPAIN

DHL

TRANSNATUR

C/ RUMANIA 4

C/ LUXEMBURGO, 1

COSLADA

CENTRO DE TRANSPORTES COSLADA

MADRID, SPAIN

MADRID, SPAIN

COMMODITIES:

QTY DESCRIPTION

ECCN

16 MODEL: IRHLUB770Z4, RADIATION HARDENED

9A004



EXPORT LICENSE
U.S. DEPARTMENT OF COMMERCE
INDUSTRY AND SECURITY

D508028

VALIDATED: APR 18 2013

EXPIRES: APR 30 2015

THIS LICENSE AUTHORIZES THE LICENSEE TO CARRY OUT THE EXPORT TRANSACTION DESCRIBED ON THE LICENSE (INCLUDING ALL ATTACHMENTS). IT MAY NOT BE TRANSFERRED WITHOUT PRIOR WRITTEN APPROVAL OF THE OFFICE OF EXPORT LICENSING. THIS LICENSE HAS BEEN GRANTED IN RELIANCE ON REPRESENTATIONS MADE BY THE LICENSEE AND OTHERS IN CONNECTION WITH THE APPLICATION FOR EXPORT AND IS EXPRESSLY SUBJECT TO ANY CONDITIONS STATED ON THE LICENSE, AS WELL AS ALL APPLICABLE EXPORT CONTROL LAWS, REGULATIONS, RULES, AND ORDERS. THIS LICENSE IS SUBJECT TO REVISION, SUSPENSION, OR REVOCATION WITHOUT PRIOR NOTICE.

APPLICANT REFERENCE NUMBER: BXA2172

INTERNATIONAL RECTIFIER CORP
C/O INTERNATIONAL RECTIFIER
205 CRAWFORD STREET
LEOMINSTER, MA 01453
PURCHASER:
ALTER TECHNOLOGY TUV NORD S.A.U.
C/ TOMAS ALBA EDISON 4
PCT CARTUJA 93
SEVILLA, SPAIN

ULTIMATE CONSIGNEE:
INSTITUT FUR EXPERIMENTELLE
UND ANGEWANDTE PHYSIK
CAU - LEIBNIZSTRASSE 19
KIEL, GERMANY, FEDERAL REP
APPROVED END USER(S):
INSTITUT FUR EXPERIMENTELLE
UND ANGEWANDTE PHYSIK
CAU - LEIBNIZSTRASSE 19
KIEL, GERMANY, FEDERAL REP
KAYSER-THREDE GMBH
WOLFRATSHAUER STRASSE 48
MUNICH, GERMANY, FEDERAL REP

RUAG SPACE AB
SOLHUSGATAN 11
GOTEBORG, SWEDEN
HIMAC - NATIONAL INSTITUTE OF
RADIOLOGICAL SCIENCES (NIRS)
4-9-1 ANAGAWA, INAGE WARD
CHIBA, JAPAN



MOSFETS

16 MODEL: IRLHUB7970Z4, RADIATION HARDENED 9A004

MOSFETS

THE EXPORT ADMINISTRATION REGULATIONS REQUIRE YOU TO TAKE THE FOLLOWING ACTIONS WHEN EXPORTING UNDER THE AUTHORITY OF THIS LICENSE.

A. RECORD THE EXPORT COMMODITY CONTROL NUMBER IN THE BLOCK PROVIDED IN THE AUTOMATED EXPORT SYSTEM (AES)

B. RECORD YOUR VALIDATED LICENSE NUMBER IN THE BLOCK PROVIDED IN AES

VALIDATED: APR 18 2013

EXPIRES: APR 30 2015

DS08028

C. PLACE A DESTINATION CONTROL STATEMENT ON ALL BILLS OF LADING, AIRWAY BILLS, AND COMMERCIAL INVOICES.

RIDERS AND CONDITIONS:

1. 1. FOR STATED END USE ONLY. 2. NO RESALE, TRANSFER OR RE-EXPORT WITHOUT PRIOR U.S. GOVERNMENT APPROVAL. 3. THE END USERS/ULTIMATE CONSIGNEES MUST NOTIFY THE APPLICANT IMMEDIATELY OF ANY ITEM LOST (INCLUDING EXPORTED COMPONENTS AND/OR SUBASSEMBLIES CONTAINING EXPORTED COMPONENTS) AND WHAT ACTIONS WERE TAKEN TO RECOVER THE ITEM. THE APPLICANT MUST NOTIFY BIS OF THE LOSS WITHIN 15 DAYS OF NOTIFICATION BY THE END USER. SEND LOSS/THEFT REPORTS TO THE DEPARTMENT OF COMMERCE, OFFICE OF EXPORT ENFORCEMENT, BUREAU OF INDUSTRY AND SECURITY, US DEPARTMENT OF COMMERCE, 14TH STREET AND CONSTITUTION AVENUE, NW, ROOM H-4520, WASHINGTON, D.C. 20230, TEL. (202) 482-1208, FACSIMILE (202) 482-0964 WITHIN 15 DAYS. 4. THE PARTIES TO THIS LICENSE THAT WILL INSTALL/INCORPORATE THE LOOSE EXPORTED COMPONENTS MUST MAINTAIN RECORDS OF ALL COMPONENTS SHIPPED UNDER THIS LICENSE TO INCLUDE LICENSE NUMBER, PART NUMBER, SERIAL NUMBER, QUANTITY, DATE OF INSTALLATION INTO THE NEXT HIGHER ASSEMBLY, PART NAME, PART NUMBER AND SERIAL NUMBER OF NEXT HIGHER ASSEMBLY, AND NUMBER OF RETURNED, DAMAGED OR DESTROYED PARTS. THESE RECORDS SHALL



BE MADE AVAILABLE TO THE US GOVERNMENT UPON REQUEST. 5. ALL PARTIES TO THIS LICENSE MUST BE INFORMED OF ALL LICENSE CONDITIONS.

2. THIS TRANSACTION IS ELIGIBLE FOR EXPORT WITHOUT A LICENSE USING

LICENSE EXCEPTION STA. PLEASE REFER TO PART 740.20 OF THE EXPORT ADMINISTRATION REGULATIONS, AMENDED JUN 16, 2011 FOR THE SPECIFIC REQUIREMENTS OF THIS LICENSE EXCEPTION. PRIOR TO EXPORTING UNDER LICENSE EXCEPTION STA PLEASE ENSURE YOU COMPLETE THE BELOW STEPS AND FOLLOW THE REQUIREMENTS IN SECTION 740.20 OF THE EXPORT

ADMINISTRATION REGULATIONS. 1) PRIOR CONSIGNEE STATEMENT: OBTAIN A COPY OF YOUR CONSIGNEE'S ACKNOWLEDGEMENT STATEMENT THAT WOULD COVER THIS EXPORT TRANSACTION WHICH INCLUDES THE FIVE ITEMS LISTED IN CFR 740.20(D)(2) I-V. 2) NOTIFICATION TO CONSIGNEE OF STA SHIPMENT: PRIOR TO EXPORT, SEND A WRITTEN NOTICE TO YOUR CONSIGNEE NOTIFYING THEM OF THE ITEM(S) THAT WILL BE EXPORTED UNDER LICENSE EXCEPTION STA. THE WRITTEN NOTICE MAY BE CONVEYED BY PAPER DOCUMENTS OR BY ELECTRONIC METHODS SUCH AS FACSIMILE OR E-MAIL. IF YOU ARE INTERESTED, WE DO HAVE AN INTERACTIVE TRAINING TOOL ON USING STA ON OUR BIS WEBSITE:

[HTTP://BETA-WWW.BIS.DOC.GOV/INDEX.PHP/INTERACTIVE-STA-COMPLIANCE-TOO-](http://beta-www.bis.doc.gov/index.php/interactive-sta-compliance-too-)

L.