

MtronTM

RF Solutions



RF Solutions

Mission Proven Crystals, Oscillators, Filters and RF Solutions for 60 years

Mtron brings over 60 years of expert high frequency design and manufacturing experience to our RF Solutions product lines. Designed for extreme Aerospace, Defense and Avionics as well as Commercial requirements, Mtron produces world-class RF Solutions spanning frequencies from 10MHz to 50GHz at our AS9100D operations.

Applications:

- Transceivers for Data-links and Smart Munitions
- Transmit and Receive Modules
- Switched Filter Banks
- Frequency Converters
- Wide Band Receivers
- Clock Distribution Assemblies

bsi.



Certificate of Registration

QUALITY MANAGEMENT SYSTEM - AS9100D AND ISO 9001:2015

This is to certify that:

M-Tron Industries Inc.
1703 E. Highway 50
Yankton
South Dakota
57078
USA

Holds Certificate No:

FM 579007

and operates a Quality Management System which complies with the requirements of AS9100D (technically equivalent to EN9100:2018 and JISQ 9100:2016) and ISO 9001:2015 and is assessed in accordance with AS9104/1 for the following scope:

The design and manufacture of quartz crystals, oscillators and custom built thick film hybrids.
The purchase and testing of quartz crystals and oscillators for resale.

bsi.



Certificate of Registration

QUALITY MANAGEMENT SYSTEM - AS9100D AND ISO 9001:2015

This is to certify that:

MtronPTI
2525 Shader Road
Orlando
Florida
32804
USA

Holds Certificate No:

FM 690357

and operates a Quality Management System which complies with the requirements of AS9100D (technically equivalent to EN9100:2018 and JISQ 9100:2016) and ISO 9001:2015 and is assessed in accordance with AS9104/1 for the following scope:

Designer and manufacturer of radio frequency components and assemblies used in defense, aerospace, avionics, instrumentation, telecommunications, industrial, medical and space applications.

For and on behalf of BSI:

Artango
Carlos Pitarco, Chief Operating Officer - Americas

Original Registration Date: 2013-06-20
Reissue Date: 2022-06-20

Issue Date: 2022-06-20
Expiry Date: 2025-06-19



This certificate remains the property of BSI and shall be returned immediately upon request.
An electronic certificate can be authenticated <https://www.bsigroup.com/ClientDirectory>. Printed copies can be validated at www.bsigroup.com/ClientDirectory.
To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, 389 Chiswick Road, Uxbridge, Middlesex UB8 3PH, UK.
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Managed by BSI Group America Inc., 12905 Westgate Drive, Suite 800, Herndon, VA 20175-6007 USA +1 703 437 8000
A Member of the BSI Group of Companies.

Artango
Managing Director - Assurance, Americas

Issue Date: 2024-01-13
Expiry Date: 2027-01-12

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...making excellence a habit.™

on request,
visit www.bsigroup.com/ClientDirectory

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...making excellence a habit.™

Mtron's RF Solutions design and development modeling uses the same circuit, electromagnetic, mechanical, thermal, and stress analysis tools as our customers. This allows Mtron's RF Solutions design synthesis to be effortlessly integrated into the customer's system synthesis at early stages in the development process. This design collaboration essentially makes Mtron's design team an extension of the customer's design team and allows our customer's resources to focus on their areas of expertise. The result of having Mtron focus on the design concept, prototype development, and transition to full rate production is a shortened design cycle and a faster time to market.

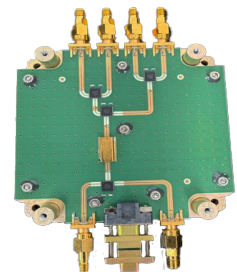
Switch Filter Bank



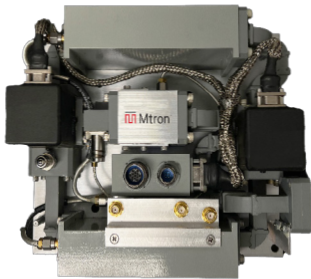
Clock Distribution Assembly



Space Level RF Switch Assembly



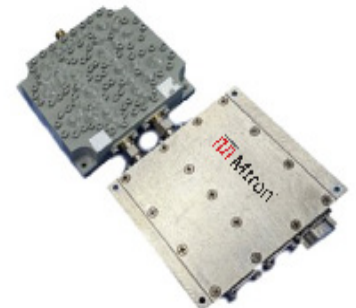
Ku Band Tx/Rx Solution



C Band Diplexer Splitter Assembly



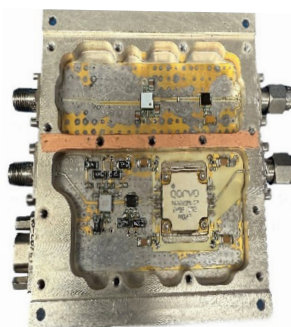
Ku Band CDL Tx/Rx Solution Diplexer, SSPA and LNA



PLL Integrated References



Ku Band CDL Tx/Rx Solution SSPA and LNA



Technology Partnering



Mtron's advanced design and engineering capabilities, coupled with multi-disciplined vertical integrations, enable us to provide complex assemblies that seamlessly integrate into sophisticated technology platforms.

Features

- Low Insertion loss
- Low system noise figure
- Designed for Harsh Environment
- Low phase noise
- High isolation
- Fast switching time
- Excellent SWaP-C
- Temperature Stability
- High power
- Integrated Control Electronics
- SSPAs
- LNAs

In House Testing

- Fine Leak Testing - Helium per MIL-STD-202, Method 112
- Gross Leak Testing per MIL-STD-202, Method 112
- Random Vibration per MIL-STD-202, Method 214A
- Sinusoidal Vibration per MIL-STD-202, Method 201 and 204
- Mechanical Shock per MIL-STD-202, Method 213
- Thermal Shock per MIL-STD-202, Method 107
- Terminal Strength per MIL-STD-202, Method 211
- PIND (Particle Impact Noise Detection) per MIL-STD-202, Method 217
- Other Miscellaneous Testing including: Life, Immersion, Humidity, Barometric Pressure and Solderability
- Dielectric Withstanding Voltage and Insulation Resistance
- X-ray fluorescence (XRF) Analysis

Full DC and RF Testing

- RF Testing 100 kHz to 40 GHz
- In-house Power Testing

Production Capabilities

- Automated Intermodulation Testing
- Lead Attached 5x7mm package
- In house Crystal Processing
- World-class FOD Control
- Laser Weld

Workmanship Standards

- In-house J-STD-001 Certified Trainer
- J-STD-001 Class 2 and 3



WE KNOW RF SOLUTIONS

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