MODULAR DIRECT SYNTHESIZER

TECHNICAL FEATURE

FEATURES

- Low Phase Noise
- Fast Switching Speed
- VITA 48.2 VPX Package and Backplane Configuration
- Internal Built-in Test Functions
- Highly Integrated Multilayer Microwave Circuits



PERFORMANCE

| Output Frequency | X and K-bands |
|------------------------------------|--------------------|
| BITE FunctionPow | er Level Detectors |
| Channel to Channel Isolation | >72 dB |
| Spurious | < -72 dBc |
| Residual Phase Noise144 dBc/Hz(10k | KHz offset) K-Band |
| RF Connection Interface | SMPM Blind Mate |
| Operating Temperature Range | 40 to +85°C |
| Package Size | Vita 48.2, Type 1 |

DESCRIPTION

This Synthesizer incorporates advanced features providing exceptional unit performance and functional integration. Up to eight independent frequency outputs with dual phase matched outputs are contained within the VPX configuration package. Exceptional signal fidelity is achieved through the use of high performance low noise amplifiers and multipliers.

The unit contains advanced control features provided through the high-speed VPX backplane.

A very high level of integration was achieved using multi-layer microwave circuits realized by complex 3D simulations and Crane Electronics' proprietary process for multi-layer microwave substrate fabrication.

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