RFS1080 Radio Frequency System-in-Package (RF SiP)

With more functionality, higher performance, and smaller form factor than traditional surface-mount boards, the Mercury RFS1080 RF SiP redefines the way sensors process information. This broadband, chip-scale solution enables multiple channels of direct digitization with industry-leading FPGA technology in a compact BGA package.

Customize with your optimal combination of RF and digital chiplets – integrated with dense, high-speed silicon interconnects – for a single packaged design to satisfy your program requirements.

Benefits
- Brings high performance RF and processing to the sensor edge, enabling low-latency data processing
- Up to 83% smaller, 64% lighter, 74% more efficient and 48% less expensive than next-generation board-level solutions
- Customizable to include third-party chiplets, typically in less than 12 months
- Manufactured in a DMEA-trusted facility

SWaP Specifications
- Width: 1.97 in (50mm)
- Depth: 1.97 in (50mm)
- Height: 0.20 in (5mm)
- BGA Pitch: 0.04 in (1mm)
- Weight: < 40 g
- Power: 140W (typical)
Board-Level Integration Support
In addition to offering chip-scale solutions, we leverage our mixed-signal module design expertise to provide a customized board solution for your specific application. Our standard product portfolio includes 3U and 6U OpenVPX and SOSA™ boards. Contact our technical team for an integrated RF SiP solution at custom.microelectronics@mrcy.com.

Rapid Customization
Through our heterogeneous integration technology, we can rapidly customize designs to include commercial as well as customer-supplied chiplets, including security, digital signal processing and many others.

Custom Expertise
Interested in a trusted microelectronics design? Contact a Mercury expert now at custom.microelectronics@mrcy.com to get started.