Integrated Microwave Assemblies

- Receivers
- Attenuators
- Upconverters
- Downconverters
- Integrated Front Ends
- Pulse Compressors
- Assemblies
CPI Beverly Microwave Division (BMD) has extensive experience in the design and development of integrated microwave assemblies. Each integrated design uses a mixture of electrical and mechanical design tools to optimize the performance, weight, heat transfer and mechanical stability under harsh environmental conditions. Each design utilizes proven technology to develop a custom module around a customer’s requirements.

**Applications:**
- Missile seekers
- Airborne radar and EW
- Unmanned aerial vehicles (UAV)
- Ground based systems
- Naval radar
- Air traffic control

**Absorptive High Power Integrated Assemblies**
- Highly selective filter
- Low noise figures
- Fast recovery time

**Digital Attenuators**
- Available in frequencies: L, S, C, X, Ku, Ka Bands
- Low insertion loss
- Digital / Analog control
- Fast switching time
- Available with waveguide or coax interfaces

**Receivers**
- Available in frequencies: L, S, C, X, Ku, Ka Bands
- Low noise figures
- Digital gain control
- Linearized RF attenuation
- Very high dynamic range
- Switched IF filter
- Dual-conversion radar receivers
- Fast recovery time

For more IMA products: www.cpii.com/bmd
Integrated Front Ends
• Frequency range: 10 kW to 100 kW
• Low noise figure
• High power handling
• Multifunction capability

Pulse Compressor Assemblies
• Available in frequencies: L, S, C, X, Ku, Ka Bands
• Low noise figures
• Digital gain control
• Very high dynamic range
• Switched IF filter
• Dual-conversion radar receivers
• Fast switching time

Upconverters / Downconverters
• Available in frequencies: L, S, C, X, Ku, Ka Bands
• High spurious rejection
• Adjustable filter bandwidth
• Gain control
• RF gating capability

High Power Integrated Assemblies
• Fast recovery time
• Low noise figures
• BITE Circuits

• Amplifiers • Modulators • Magnetrons • Crossed Field Amplifiers • Ring Loop Traveling Wave Tubes • Power Couplers
Radar Block Diagram

Historically, radar system designers selected various components from different suppliers without the ability to accommodate how they interact. CPI BMD has a successful history of providing additional functionality to receiver protectors, by integrating passive and active components into a single, Integrated Microwave Assembly (IMA).

**CPI BMD produces a compact, more efficient integrated component, by optimizing performance, reducing development costs and ultimately, providing increased functionality to the end product.**

This Radar Block Diagram depicts the various building blocks of a typical radar system that CPI BMD is capable of integrating to fit your design needs.

Ask us about integrating your designs today.