

MAGNUM RF™

GANGED, MULTI-POSITION SMPM FAMILY

5G NETWORKING, MILITARY/DEFENSE, RADAR, TEST & MEASUREMENT

OVERVIEW, FEATURES & BENEFITS

The push-on SMPM connector was selected as the baseline for Samtec's newest ganged, multi-position product family due to performance, density and blind-mate advantages. SMPM is ideal when space is limited and a high operating frequency is required.

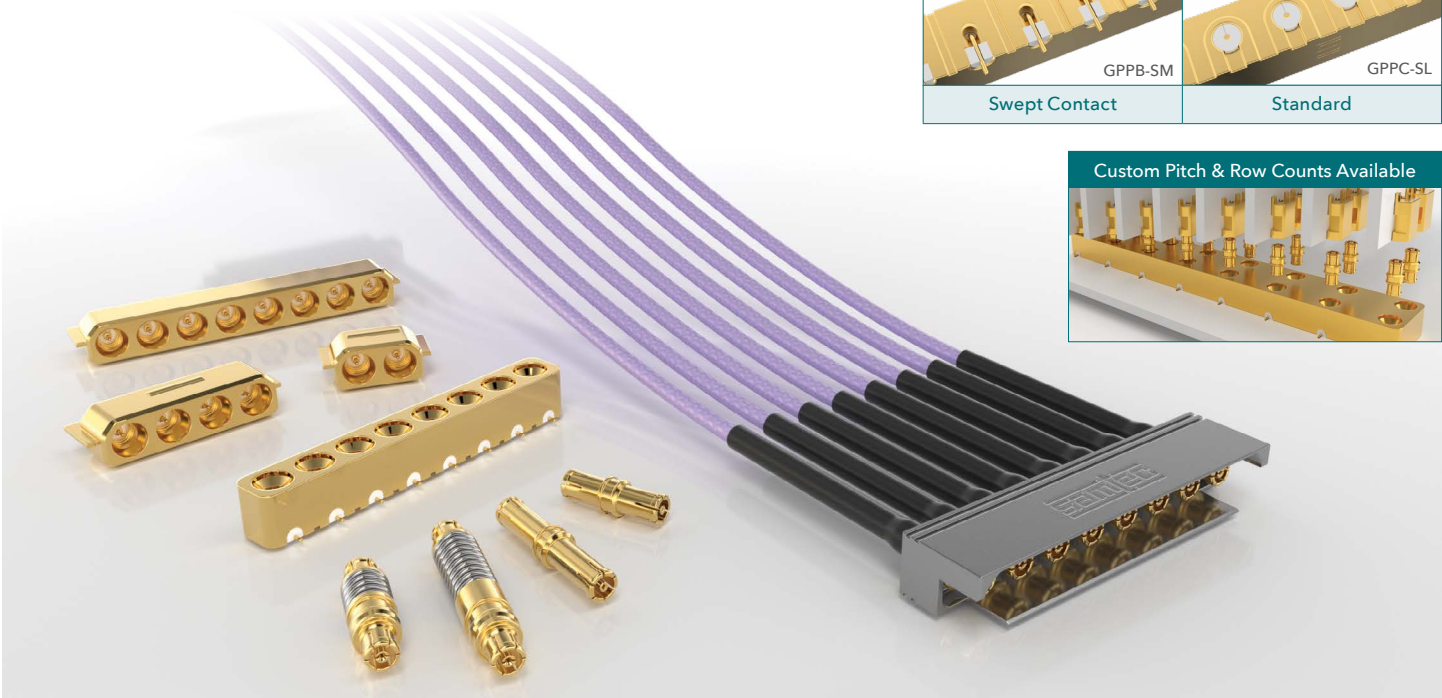
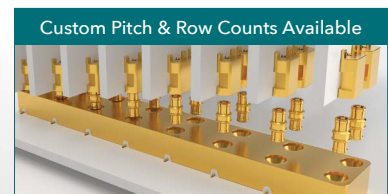
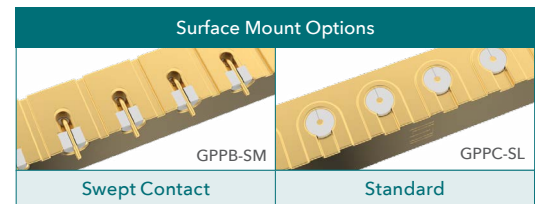


Performance - SMPM connectors, by design, will operate mode-free up to 65 GHz. This attribute enables decisions today to support low- or mid-band system requirements. As a result, there is no need to specify and qualify a different connector type as operating frequency bands increase in the near future.

Micro-miniature, high-density - Another SMPM connector benefit is its small size when integrating or laying out footprints on PCB real estate. When integrating with cable assemblies, these parts lend themselves to smaller diameter materials and smaller bundle sizes for weight savings and increased airflow for cooling.

Interconnects are available for solving both cable-to-board and board-to-board mating requirements:

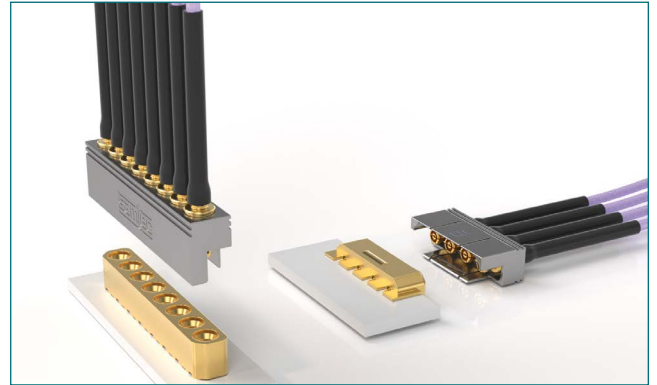
- **blocks** GPPC or GPPB
- **bullet adaptors** PRFIA (standard or spring-loaded)
- **cable assemblies** GC47 or GC86



Cable-to-Board

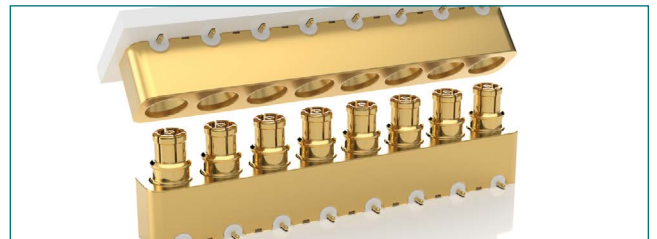
EDGE LAUNCH		VERTICAL LAUNCH	
Mated Sets		Mated Sets	
Block, Edge Mount	GPPC-EM	Block, Surface Mount	GPPC-SL
Cable Assembly	GC47 or GC86	Cable Assembly	GC47 or GC86

- Cable assembly end 2 options: ganged or individual industry standard RF connectors
- Cable type: .047" or .086" low-loss flexible
- Pitch: 3.56 mm (.140"); single-row

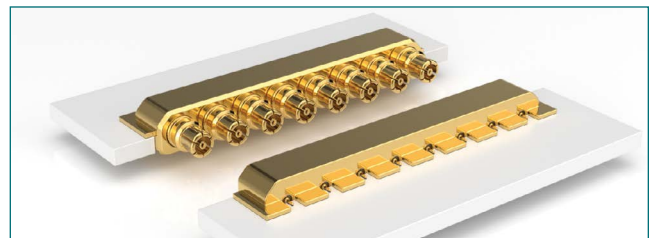


Board-to-Board

MEZZANINE • Vertical installation with bullet adaptor	
Mated Sets	
Top Block, Surface Mount	GPPB-SM or GPPC-SL
Bullet, Standard or Spring-Loaded	PRFIA
Bottom Block, Surface Mount	GPPB-SM or GPPC-SL



COPLANAR • Edge mount with bullet adaptor	
Mated Sets	
Edge Mount	GPPC-EM
Bullet, Standard or Spring-loaded	PRFIA
Edge Mount	GPPC-EM



PERPENDICULAR • Edge mount to bullet adaptor to surface mount	
Mated Sets	
Top Block, Edge Mount	GPPC-EM or SMPM-EM
Bullet, Standard or Spring-loaded	PRFIA
Bottom Block, Surface Mount	GPPB-SM or GPPC-SL



- Block options: single-row as cataloged standard (double or multi-row options as custom)
- Bullet adaptors accommodate axial and radial misalignment in blind mate applications
- Spring-loaded adaptors provide higher vibration tolerance for maintaining consistent signal contact
- Standard channel-to-channel pitch: 3.56 mm (.140") (custom pitch designs available)
- Custom solutions available (multiple rows, channel count, channel pitch)
- Discrete cable assemblies can be mated to each channel (RF cable assembly mates: RF086, RF047-A or RF23C)
- GPPC-SL = standard surface mount
- GPPB-SM = surface mount with swept contact