

MEZZANINE STACKING CONNECTORS

ANALOG, DIGITAL & RUGGED/POWER

Persistent constraint on PCB space and the expansion of wireless communication (IoT) is forcing designers to place analog connectors alongside digital and power connectors for mixed signaling applications. For design flexibility Samtec offers a wide variety of connectors with matching stack heights to their analog counterparts, including: (2) • Common flexible stacking headers and sockets for low-speed signal routing • Ultra rugged connectors rated to 1,000 mating cycles • High power connectors capable of 18 Amps per power blade 12 mm • High-speed, high-density array connectors up to 800 total pins with 112 Gbps PAM4 performance 11 mm Stack Heights 9, 10, 11, 12, 16 Tolerance +0.25 10 mm High-speed board-to-board, flex stacking and rugged/power connectors 9 mm Standoffs and guide posts for a reliable connection

Three piece SMP connector system with true DC to 40 GHz performance

TIPS & CONSIDERATIONS FOR PAIRING MULTIPLE CONNECTORS

- Perform a detailed tolerance stack-up analysis long before manufacturing begins (samtec.com/tolerance-stacking)
- Guide posts or standoffs are recommended; place close to the connector system to decrease PCB stress (samtec.com/sureware)
- Ensure the analog connector mates first with zero gap, preventing unwanted discontinuities
- Employ effective shielding and dedicated grounds for optimal system signal integrity
- Confirm proper connector wipe for clean, reliable mating (samtec.com/contactwipe)
- Consider an Analog Over Array™ approach when frequency, crosstalk and return loss requirements are less stringent (samtec.com/AOA)

Contact ASG@samtec.com

SOLUTIONATOR®: BUILD A MATED SET

Quickly build mated connector sets using a wide variety of user-defined search parameters/filters, view specs and order samples.



samtec.com/hsb2b-solutionator



samtec.com/flex-solutionator











STACK HEIGHTS	9 mm	10 mm	11 mm	12 mm	16 mm
RF/SMP (40 GHz)					
SMP / SMP-B*					
RUGGED/POWER					
UMPT / UMPS (mPOWER®)					
SFM / TFM (Tiger Eye™)					
TEM / SEM (Tiger Eye™)					
TEMS / SEMS (Tiger Eye™)					
IPT1 / IPS1 (Mini Mate®)					
FLEX STACKING					
FLE / FW (Tiger Beam™)					
TSM / SSM (Tiger Claw™)					
FW / CLP (Tiger Claw™)					
MTLW / SSW (Tiger Buy™)					
MTSW / SSW (Tiger Buy™)					
TW / MMS (Tiger Claw™)					
TW / SQT (Tiger Buy™)					
TW / SQW (Tiger Buy™)					
TW / TLE (Tiger Beam™)					
DWM / SLM (Tiger Buy™)					
DW / BCS (Tiger Claw™)					
DW / SSW (Tiger Buy™)					
HW / HLE (Tiger Beam™)					
HW / SSM (Tiger Claw™)					
HIGH-SPEED BOARD-TO-BOARD					
SEAM / SEAF (SEARAYTM)					
SEAM8 / SEAF8 (SEARAY™)					
ADF6 / ADM6 (AcceleRate® HD)					
APM6 / APF6 (AcceleRate® HP)					
ERM8 / ERF8 (Edge Rate®)					
QMS / QFS (Q2 TM)					
QRM8 / QRF8 (Q Rate®)					
QTH / QSH (Q Strip®)					
GUIDE POSTS, STANDOFFS					
GPSO (SureWare™)					
GPSOM (SureWare™)					
SO (SureWare™)					
JSO (SureWare™)					

 $[\]verb|*SMPM| also available including spring loaded adaptors to accommodate larger axial misalignment$

