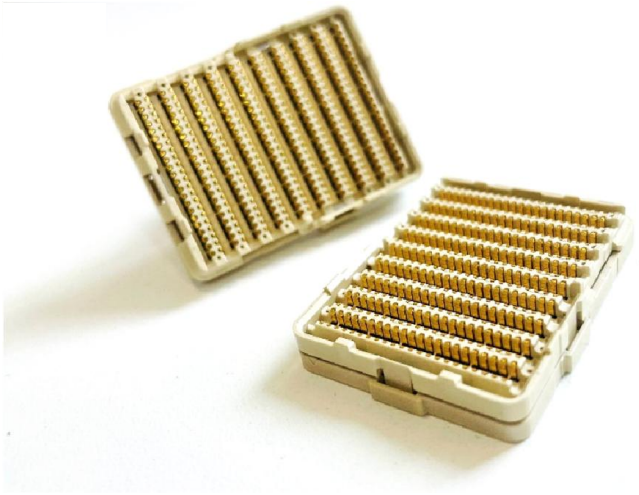
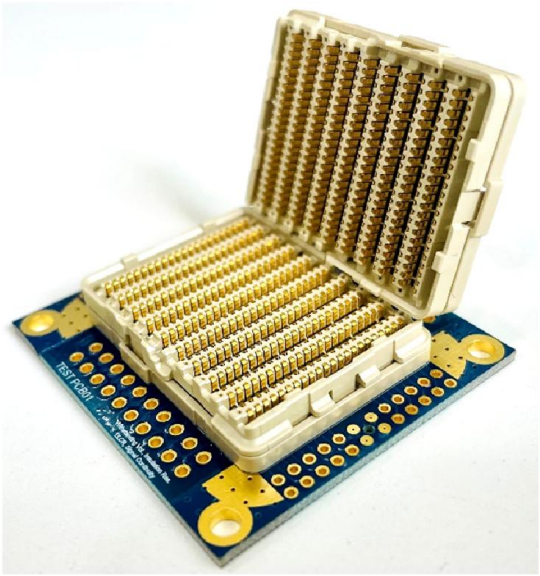
High Speed Connector 1.0mm Pitch Systems

Features

- Higher bandwidth applications 56 Gbps NRZ, 112 Gbps PAM-4
- Stack heights from 5.0mm to over 16.0mm
- High pin counts : Up to 418 total contacts (95 differential pairs)
- Pitch 1.0 mm x 1.6mm
- Differential pair 100ohm(or 92ohm) nominal impedance
- Surface Mount BGA Pin Design





Benefits

- Minimizes impedance discontinuities
- Excellent Insertion and Return loss performance
- Low crosstalk noise and resonances
- Biggest forced-offset(Rigid alignment) tolerance
- Hermaphroditic mating interface
- Integrated power and additional signal pin per column

Application

- Telecommunication and Data Embedded
- Data Servers and Storage
- Industrial Controls and Equipment
- Medical Instrumentation
- Military Electronics
- Network Diagnostics
- Test and Measurement Electronics

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▪ MECHANICAL PERFORMANCE

- Mating Tolerance :
  - X: ±1.0mm(floating mating)
  - Y: ± 1.2mm(floating mating)
  - Z: -0.2/+0.5mm
- Forced-offset (Rigid alignment) tolerance : X/Y ±0.5mm
- Mating Force 0.45N max. per contact
- Un-mating Force 0.1N min. per contact

▪ ELECTRICAL PERFORMANCE

- Contact Resistance: <10mΩ change from initial reading after environmental exposure
- Current Rating(with <30°C temperature rise above ambient): 0.5A min
- Insulation Resistance : 1000Mohm min
- Withstanding Voltage : 500Vrms min

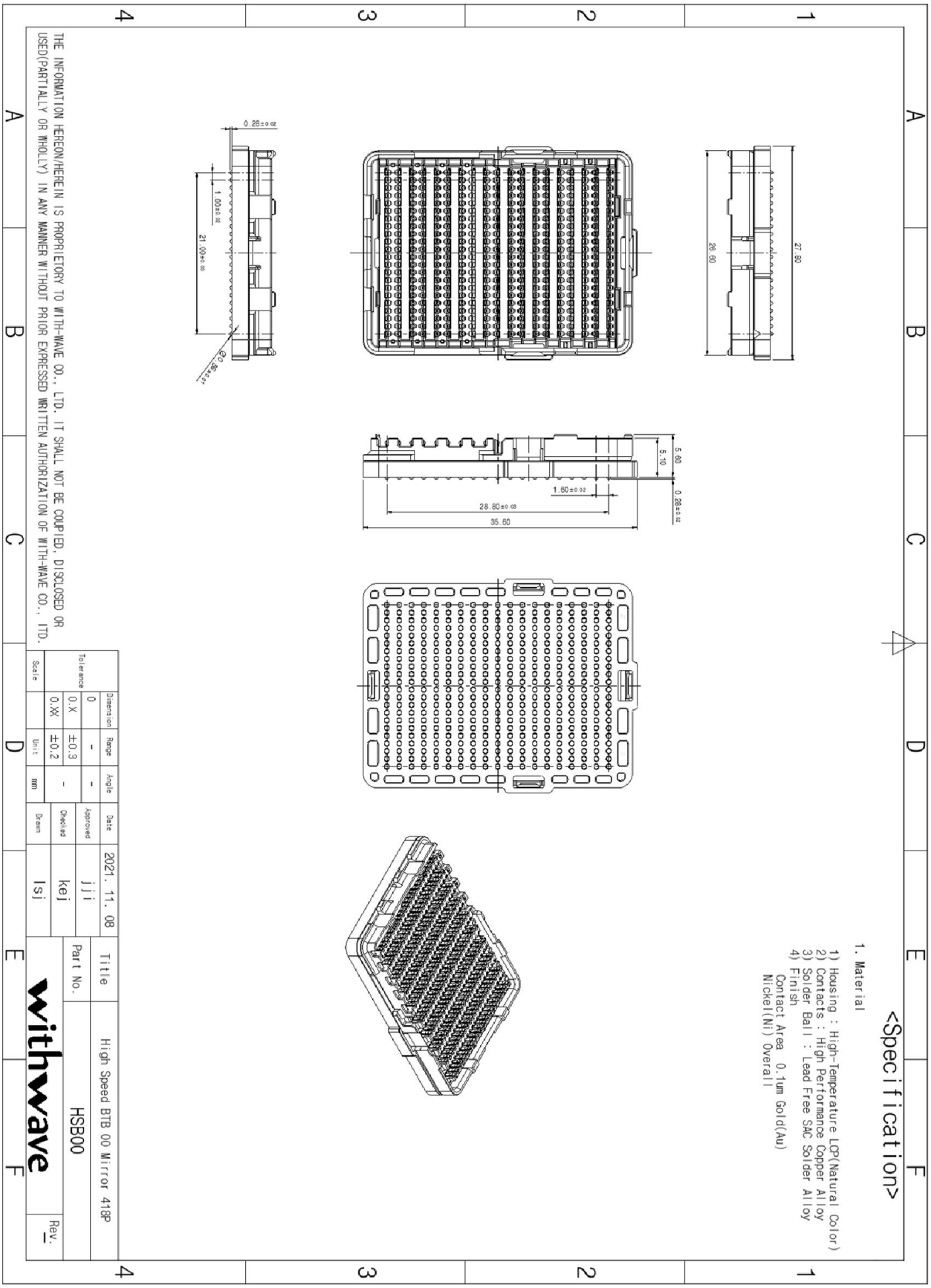
▪ MATERIAL

- Housing : High-Temperature LCP
- Contacts : High performance Copper Alloy
- Plating(s) :
  - Contact Area 30u" Gold(Au)
  - Nickel(Ni) Overall

▪ ENVIRONMENTAL

- Operating Temperature range : -55 to +85°C

■ CONNECTOR DRAWING



■ RECOMMENDED PCB LAYOUT