

## FlexLock® FPC-to-Board

### MORE FLEXIBLE SOLDERING AUTOMOTIVE GRADE CONNECTOR SYSTEM

FlexLock® FPC-to-Board connector's compact design address the growing demand for automotive application market. The connector design is compliant to USCAR-T2V2 specifications.

The connector has nominal current carrying capacity of 3A per contact to support higher power application.

FlexLock® 2.54mm pitch is available in 10 to 30 positions double row with vertical and horizontal TH configurations.

FlexLock® 3.20mm pitch is available in 10 to 26 positions double row with horizontal TH configuration.

- USCAR-T2V2 compliant
- Re-flow tin plated reduce mating force
- Position from 10 to 30 (2.54mm pitch)
- Position from 10 to 26 (3.20mm pitch)
- Connector Position Assurance (CPA)



#### TARGET MARKETS



#### FEATURES

- Re-flow tin plating process for terminal
- Current rating 3A with each contact
- Terminal Position Assurance (TPA)
- Hold down
- Connector Positioning Assurance (CPA)

#### BENEFITS

- Low mating and un-mating force
- Meet higher power Amps performance
- Ensures proper terminal insertion position and retention
- Increase the board grip force
- Ensures that connectors are properly mated and locked together

## TECHNICAL INFORMATION

### MATERIAL

- Connector Contact: Copper alloy
- Housing: High temperature UL 94V-0
- Plating: Tin plated  
8μ" GXT®/Au

### ELECTRICAL PERFORMANCE

- Voltage Rating: 48V AC/DC
- Insulation Resistance: 100MΩ min.
- Contact Resistance: 25mΩ max. (initial)
- Current Rating: 3A
- Low Level Contact Resistance: <25mΩ
- Dielectric Withstand Voltage: 500V AC
- Temperature Rise: +55°C max. for 7.32A

### MECHANICAL PERFORMANCE

- Durability: 10 cycles (tin), 30 cycles (gold)
- Mating/Un-mating Force: 75N max.
- Terminal Insertion Force: <5N max./pin
- Terminal Retention Force: 15N min.

### ENVIRONMENTAL

- Operating Temperature Range: -40°C to +105°C

### APPROVALS AND CERTIFICATIONS

- UL E66906

### SPECIFICATIONS

- Product Specification: GS-12-1679
- Product Pitch: 2.54mm, 3.20m
- PCB Termination: 1.60mm
- Packaging Specification: GS-14-2781
- Application Specification: GS-20-0707

### PACKAGING

- Header: Tape and reel
- Receptacle Housing: Tray

### TARGET MARKETS/APPLICATIONS

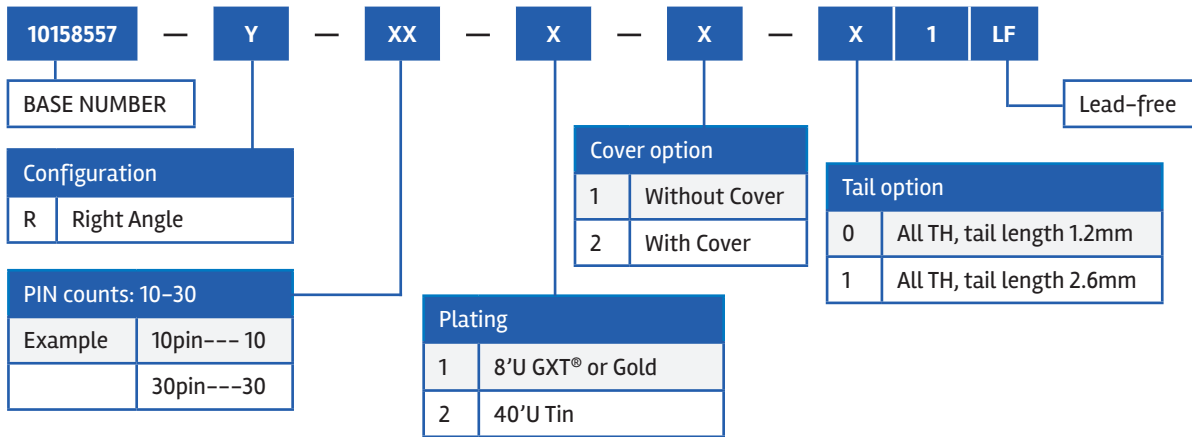


BMS (Battery Management System)  
OBC (On Board Charge)  
MCU (Micro Control Unit)

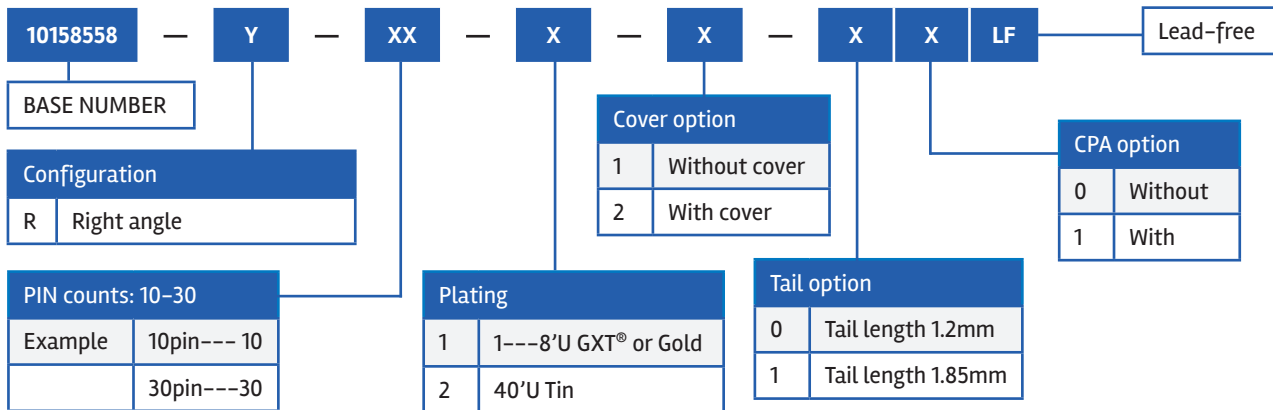


Robotics

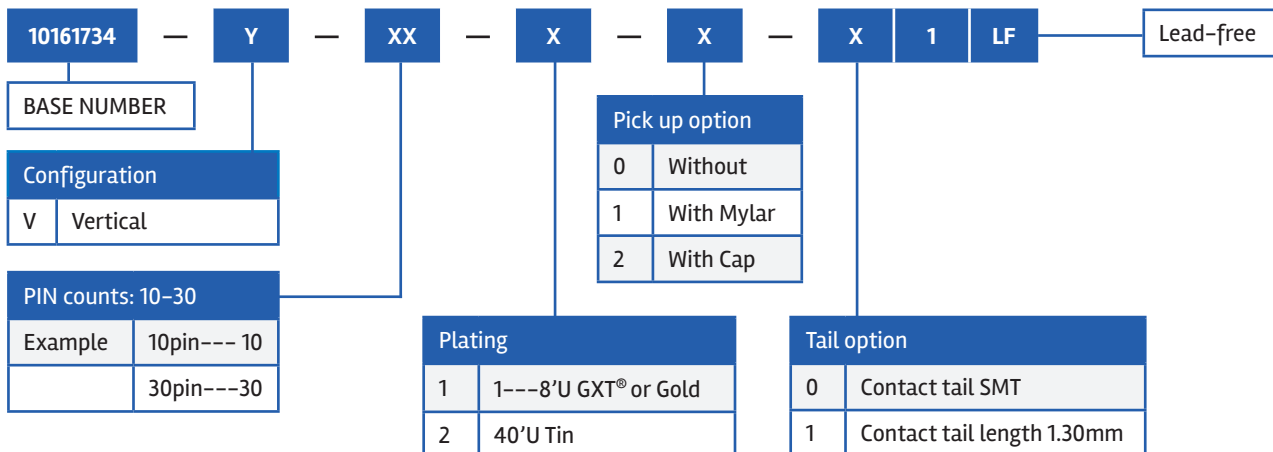
## PART NUMBER SELECTOR\_DOUBLE ROW R/A\_HEADER\_2.54MM



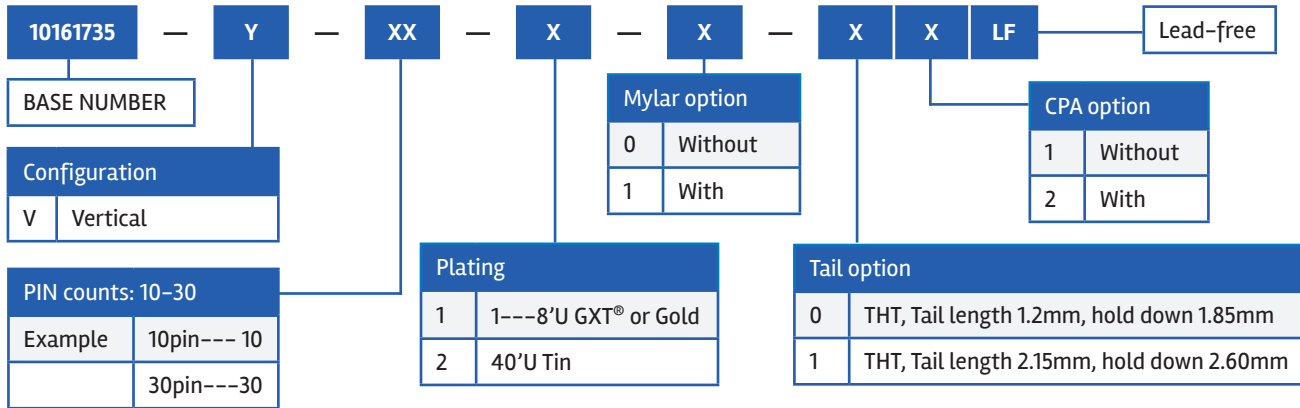
## PART NUMBER SELECTOR\_DOUBLE ROW R/A\_RECEPTACLE\_2.54MM



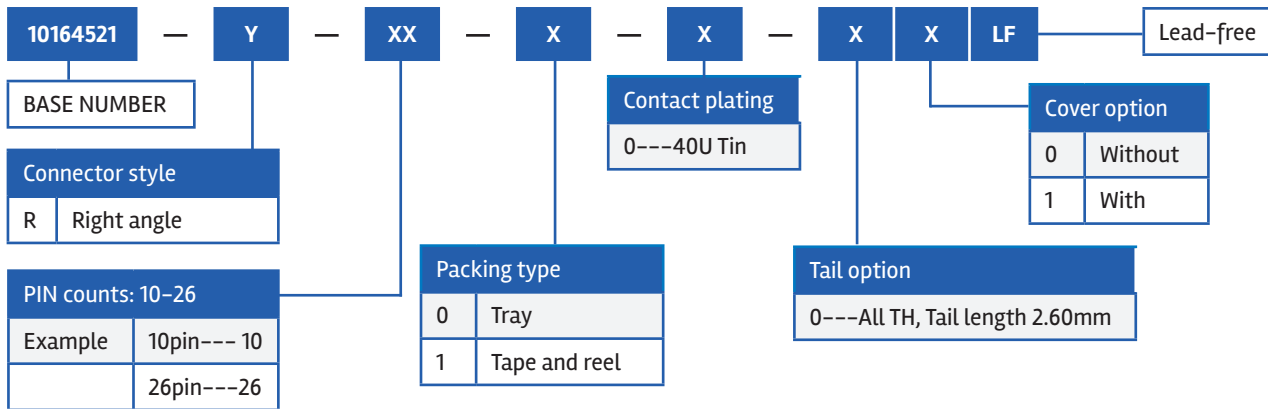
## PART NUMBER SELECTOR\_DOUBLE ROW VERTICAL\_HEADER\_2.54MM



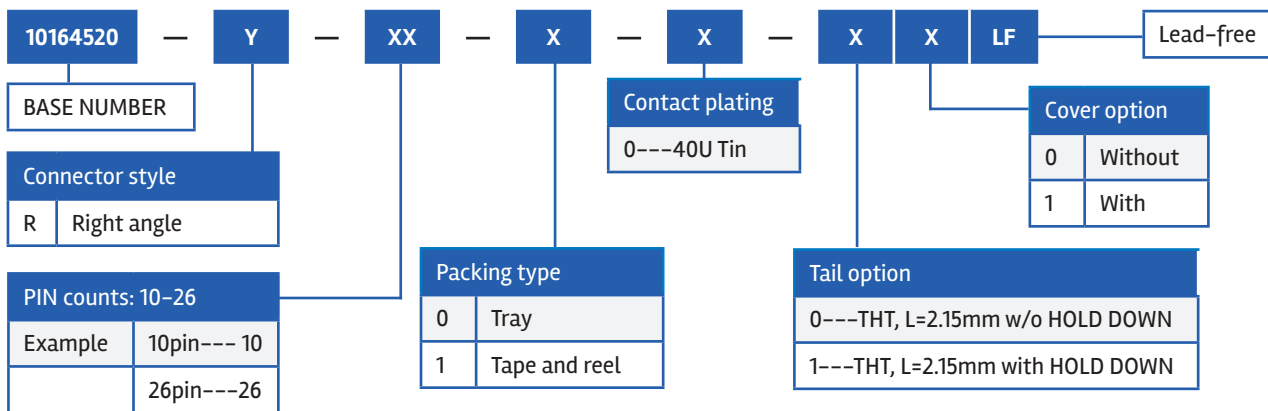
## PART NUMBER SELECTOR – DOUBLE ROW VERTICAL RECEPTACLE\_2.54MM



## PART NUMBER SELECTOR\_DOUBLE ROW VERTICAL\_HEADER\_3.20MM



## PART NUMBER SELECTOR\_DOUBLE ROW R/A\_RECEPTACLE\_3.20MM



## PART NUMBERS

Description	Part Numbers
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Board Header, 30 Position, Top Latch, Tin (preplated)	10158557-R302111LF
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Receptacle, 30 Position, Top Latch, Tin (preplated)	10161735-V302011LF
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Board Header, 28 Position, Top Latch, Tin (preplated)	10158557-R282111LF
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Receptacle, 28 Position, Top Latch, Tin (preplated)	10158558-R282111LF
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Board Header, 12 Position, Top Latch, Tin (preplated)	10158557-R122121LF
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Receptacle, 12 Position, Top Latch, Tin (preplated)	10158558-R122111LF
FlexLock®, 3.20mm FPC-to-Board Connector Platform, Board Header, 18 Position, Top Latch, Tin (preplated)	10164521-R181000LF
FlexLock®, 3.20mm FPC-to-Board Connector Platform, Receptacle, 18 Position, Top Latch, Tin (preplated)	10164520-R180001LF