

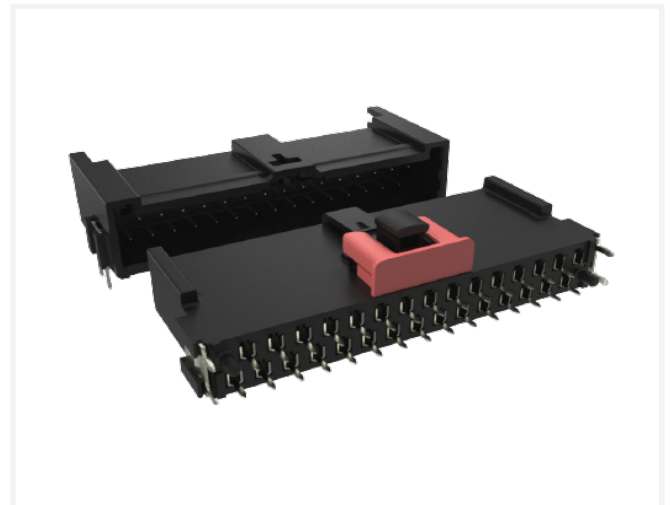
## FlexLock® 2.54mm FPC-to-Board Connectors

### AUTOMOTIVE GRADE CONNECTOR SYSTEM WITH FLEXIBLE SOLDERING

FlexLock® 2.54mm FPC-to-Board connectors are designed to address the growing demands of the automotive market. These compact USCAR-T2V2 compatible connectors have a nominal current carrying capacity of 3A per contact to support higher power application as well.

FlexLock® connectors are available in 10 to 30 positions in double row with vertical and horizontal TH and SMT configurations.

- USCAR-T2V2 compatible
- Reflow Tin plating to reduce mating force
- Available in 10 to 30 positions
- Terminal Position Assurance (TPA)
- Connector Position Assurance (CPA)



#### TARGET MARKETS



#### FEATURES

- Reflow Tin plating process for terminals
- Current rating of 3A per contact
- Terminal Position Assurance (TPA)
- Hold down design
- Connector positioning assurance (CPA)

#### BENEFITS

- Reduced mating and un-mating force
- Meets higher power Amps requirements
- Ensures proper terminal insertion position and retention
- Increases 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
  - 8u" GXT/Au

### ELECTRICAL PERFORMANCE

- Voltage Rating: 48V AC/DC
- Insulation Resistance: 100M $\Omega$  min.
- Contact Resistance: 25m $\Omega$  max. (initial)
- Current Rating: 3A
- Low Level Contact Resistance: < 25m $\Omega$
- 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
- 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

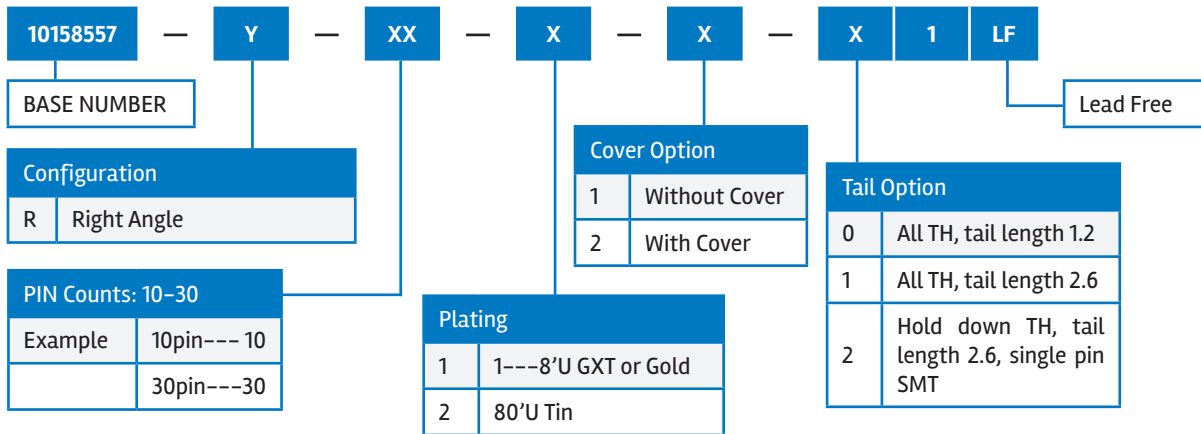


BMS (Battery Management System)  
OBC (On Board Charge)  
MCU (Micro Control Unit)

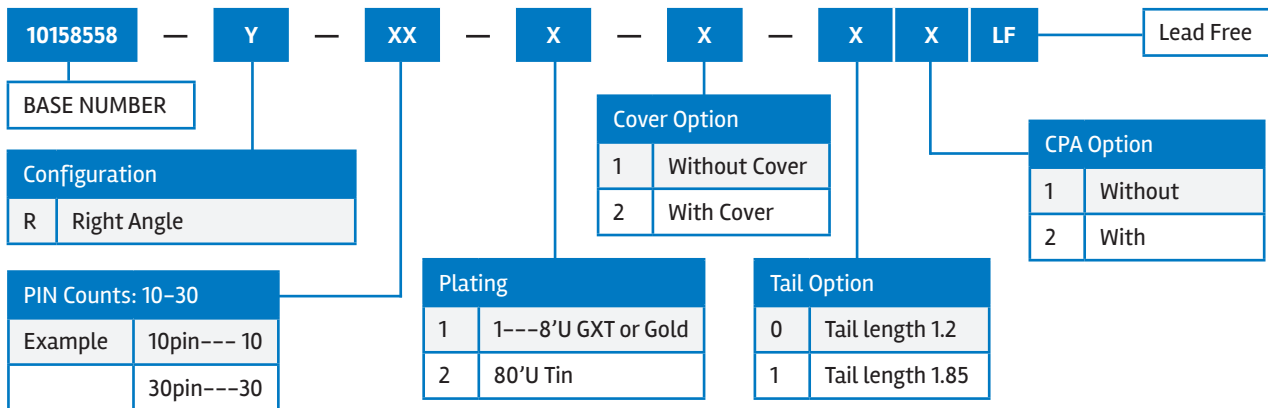


Robotics

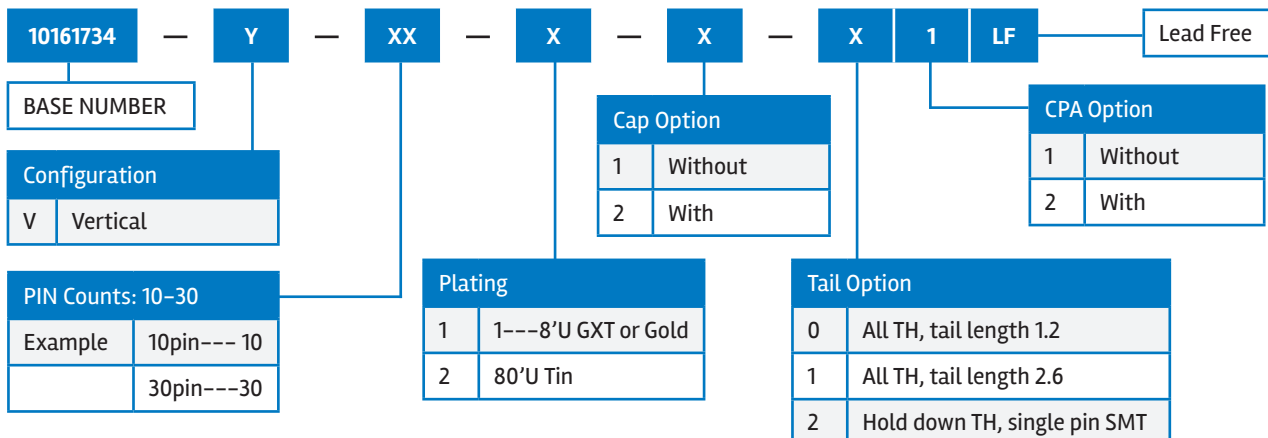
## PART NUMBER SELECTOR – DOUBLE ROW R/A\_ HEADER



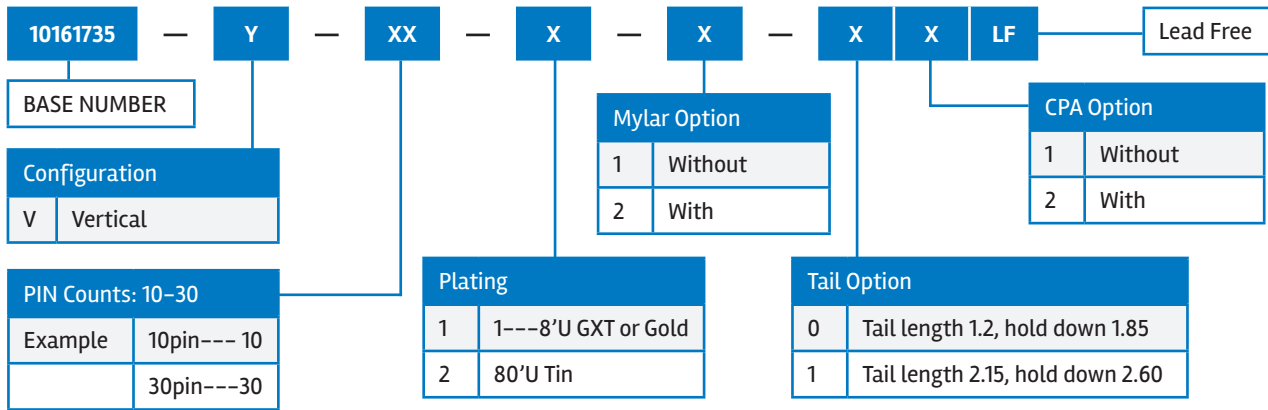
## PART NUMBER SELECTOR – DOUBLE ROW R/A\_ RECEPTACLE



## PART NUMBER SELECTOR – DOUBLE ROW VERTICAL\_ HEADER



## PART NUMBER SELECTOR – DOUBLE ROW VERTICAL RECEPTACLE



## 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