

FlexLock™ Flex-to-Board & Flex-to-Wire

MORE FLEXIBLE SOLDERING AUTOMOTIVE GRADE CONNECTOR SYSTEM

FlexLock™ FPC-to-Board and Flex-to-Wire connector's compact design address the growing demand for automotive application market. The connector design is compliant to USCAR- T2V2 and LV-214 S3 specifications.

The connector has nominal current carrying capacity of 2A per contact to support higher power application.

FlexLock™ 2.54mm pitch is supporting in 10 to 36 positions double row with vertical and horizontal TH configurations, and in 4 position single row vertical and horizontal TH configurations.

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

- USCAR-T2V2, LV-214 S3 compliant
- Re-flow tin plated reduce mating force
- Position from 10 to 36 (2.54mm pitch, double row)
- Position from 4 to 15 (2.54mm pitch, single row)
- Position from 10 to 26 (3.20mm pitch, double row)
- Connector Position Assurance (CPA)

FEATURES

- Re-flow tin plating process for terminal
- Current rating 2A 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
8μin GXT®/Au

ELECTRICAL PERFORMANCE

- Voltage Rating: 48V AC/DC
- Insulation Resistance: 100MΩ min.
- Contact Resistance: 25mΩ max. (initial)
- Current Rating: 2A
- 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
- USCAR T2V2
- LV 214 S3

SPECIFICATIONS

- Product Specification:
 - GS-12-1679 (FlexLock™ 2.54mm & 3.2mm D/R, flex-to-board)
 - GS-12-1535 (FlexLock™ 2.54mm, flex-to-wire)
 - GS-12-1745 (FlexLock™ 2.54mm S/R)
- Product Pitch: 2.54mm, 3.20mm
- PCB Termination: 1.60mm
- Packaging Specification: GS-14-2781
- Application Specification:
 - GS-20-0707 (flex-to-board)
 - GS-20-0788 (flex-to-wire)

PACKAGING

- Header: Tape and reel
- Receptacle Housing: Tray
- Cable housing: Bag

TARGET MARKETS/APPLICATIONS



BMS (Battery Management System)
OBC (On-board Charger)
MCU (Micro Control Unit)

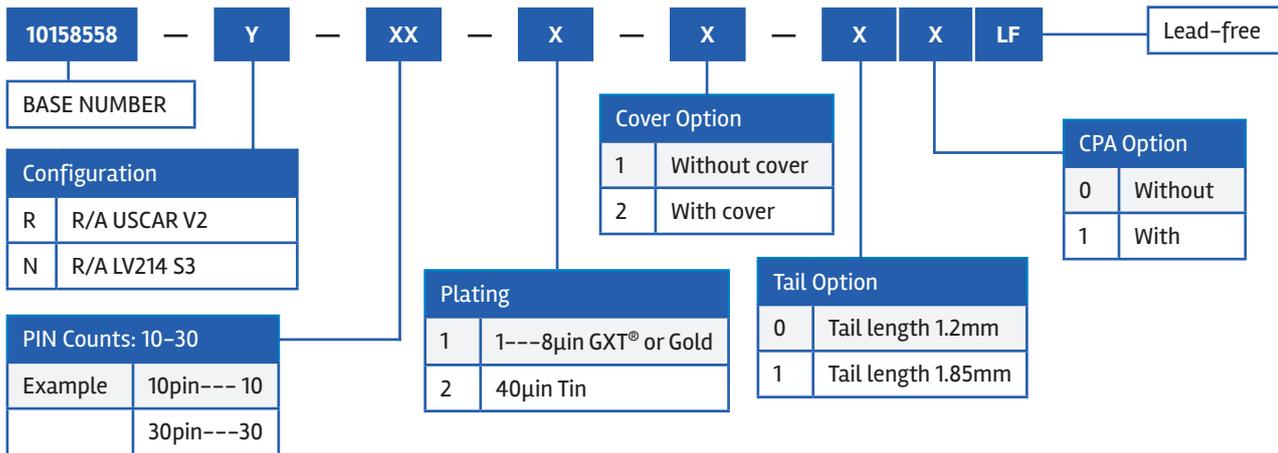


Robotics

PART NUMBER SELECTOR-DOUBLE ROW R/A-HEADER-2.54MM



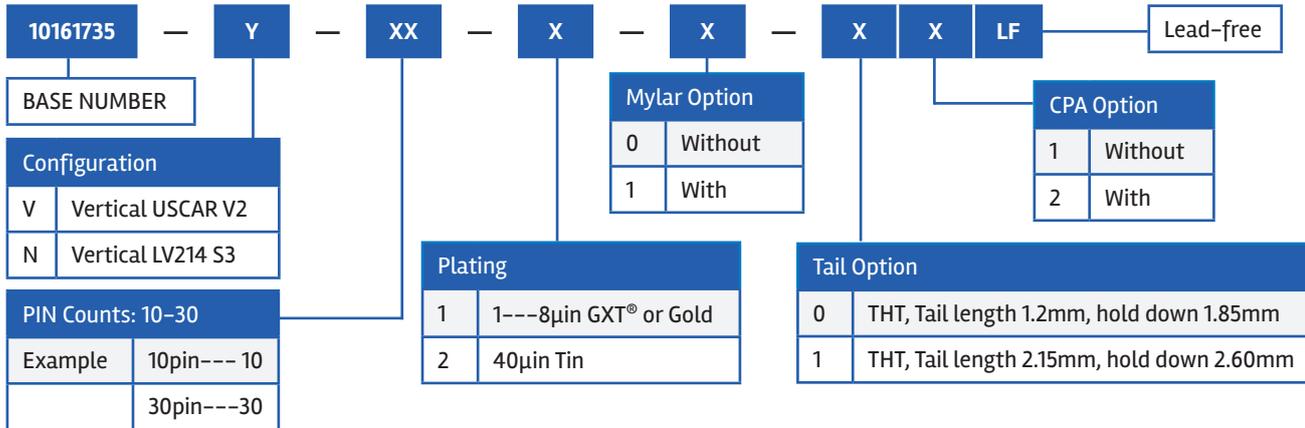
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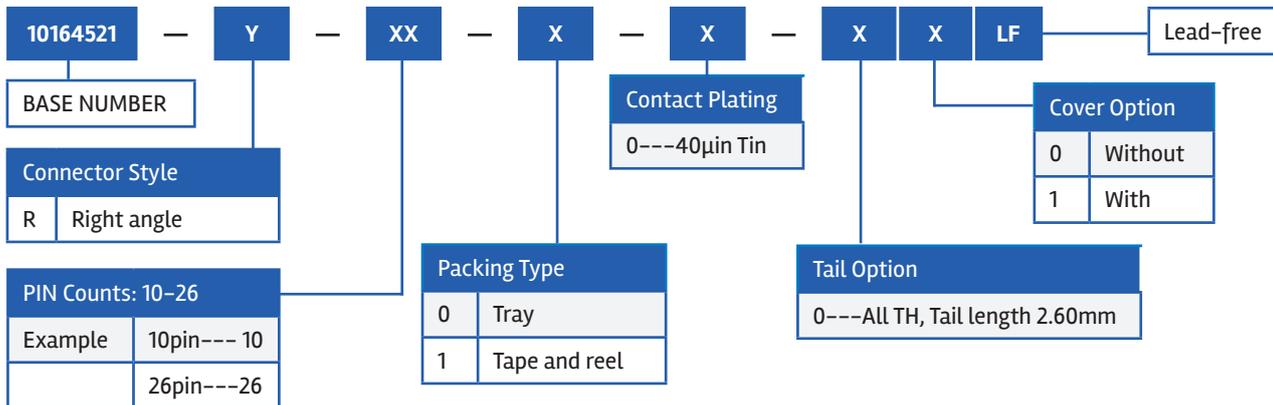
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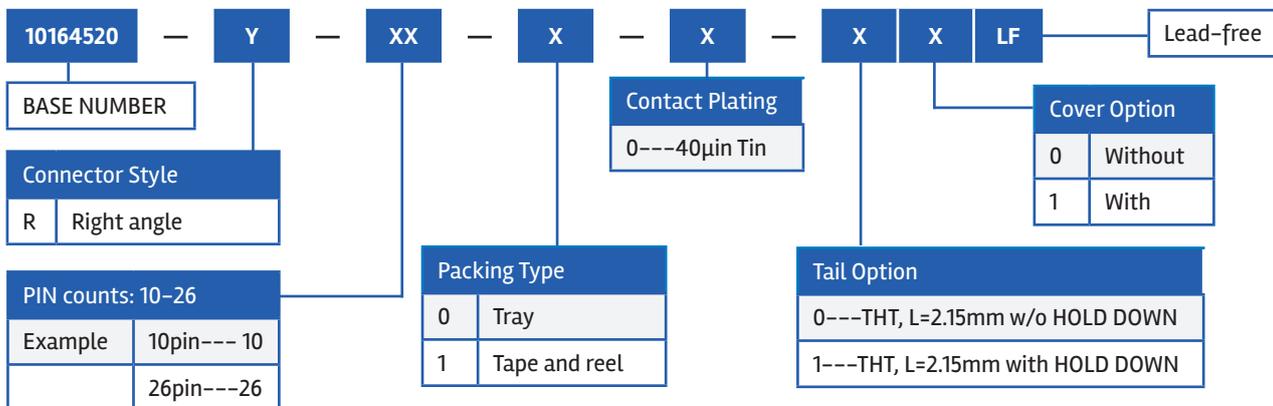
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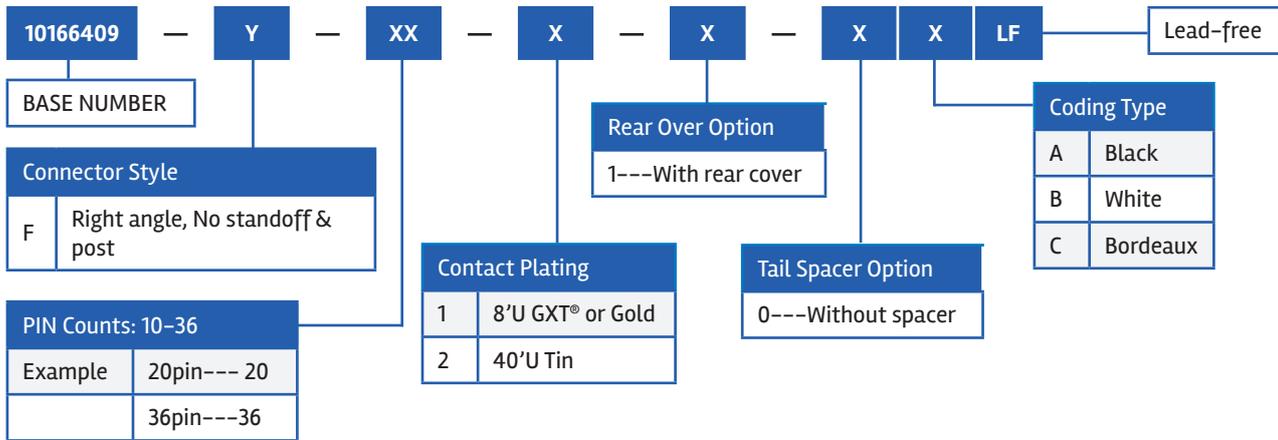
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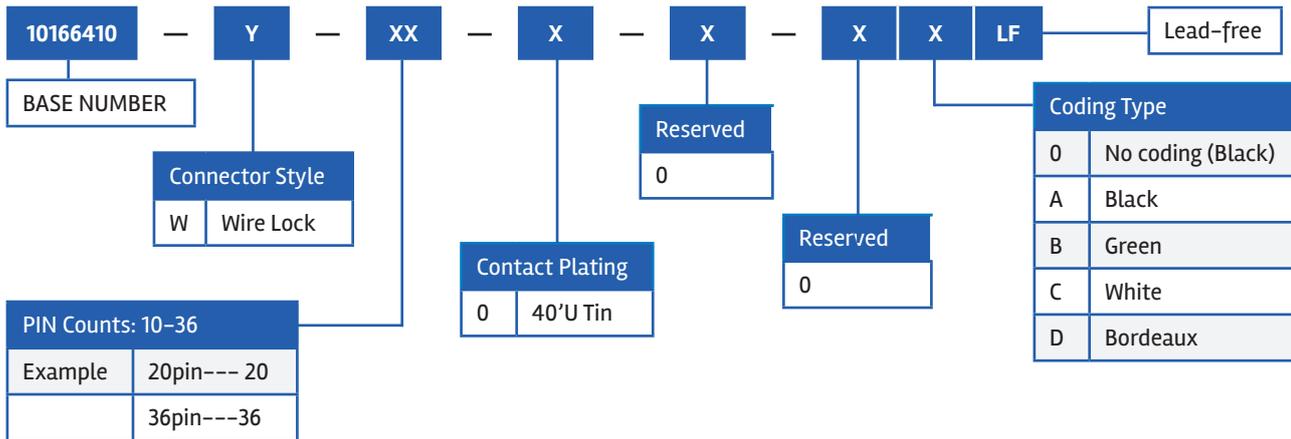
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PART NUMBER SELECTOR_DOUBLE ROW R/A_HEADER_2.54MM (FLEX-TO-WIRE)



PART NUMBER SELECTOR_DOUBLE ROW_CABLE HOUSING_2.54MM (FLEX-TO-WIRE)



PART NUMBERS

Description	Part Numbers
FlexLock™, 2.54mm FPC-to-Board Connector Platform, R/A Board Header, 30 Position, Top Latch, Tin (pre-plated)	10158557-R302111LF
FlexLock™, 2.54mm FPC-to-Board Connector Platform, VT Receptacle, 30 Position, Top Latch, Tin (pre-plated), USCAR T2V2	10161735-V302011LF
FlexLock™, 2.54mm FPC-to-Board Connector Platform, VT Receptacle, 30 Position, Top Latch, Tin (pre-plated), LV214 S3	10161735-N302011LF
FlexLock™, 2.54mm FPC-to-Board Connector Platform, R/A Board Header, 30 Position, Top Latch, 8µin GXT® or Au plating	10158557-R301111LF
FlexLock™, 2.54mm FPC-to-Board Connector Platform, VT Receptacle, 30 Position, Top Latch, 8µin GXT® or Au plating, USCAR T2V2	10161735-V301011LF
FlexLock™, 2.54mm FPC-to-Board Connector Platform, R/A Receptacle, 30 Position, Top Latch, 8µin GXT® or Au plating, USCAR T2V2	10158558-R301111LF
FlexLock™, 2.54mm FPC-to-Board Connector Platform, R/A Board Header, 28 Position, Top Latch, Tin (pre-plated)	10158557-R282111LF
FlexLock™, 2.54mm FPC-to-Board Connector Platform, R/A Receptacle, 28 Position, Top Latch, Tin (pre-plated), USCAR T2V2	10158558-R282111LF
FlexLock™, 2.54mm FPC-to-Board Connector Platform, R/A Receptacle, 28 Position, Top Latch, Tin (pre-plated), LV 214 S3	10158558-N282111LF
FlexLock™, 2.54mm FPC-to-Board Connector Platform, R/A Board Header, 4 Position, Top Latch, Tin (pre-plated)	10165157-R041000LF
FlexLock™, 2.54mm FPC-to-Board Connector Platform, VT Receptacle, 4 Position, Top Latch, Tin (pre-plated), USCAR T2V2	10165160-V040010LF
FlexLock™, 3.20mm FPC-to-Board Connector Platform, Board Header, 18 Position, Top Latch, Tin (pre-plated)	10164521-R181000LF
FlexLock™, 3.20mm FPC-to-Board Connector Platform, Receptacle, 18 Position, Top Latch, Tin (pre-plated), USCAR T2V2	10164520-R180001LF
FlexLock™, 2.54mm Flex-to-Wire, R/A header, Top Latch, Tin, USCAR T2V2	10166409 series
FlexLock™, 2.54mm Flex-to-Wire, Cable housing, USCAR T2V2	10166410 series
FlexLock™, 2.54mm Flex-to-Wire, Crimping terminal, USCAR T2V2	10163003-002LF