



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**PCN# 20250417000.1
Adding TI Malaysia (MLA) as an additional Assembly site
for select package devices
Change Notification / Sample Request**

Date: April 21, 2025

To: Mouser PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

Texas Instruments requires acknowledgement of receipt of this notification within 60 days of the date of this notice. Lack of acknowledgement of this notice within 60 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within 60 days of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the change management team.

For sample requests or sample related questions, contact your local Field Sales Representative.

TI values customer engagement and feedback related to TI changes. Customers should contact TI if there are questions or concerns regarding a change notification.

Sincerely,

Change Management Team
SC Business Services

20250417000.1
Change Notification / Sample Request
Attachments

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

| DEVICE | CUSTOMER PART NUMBER |
|---------------|-----------------------------|
| ISO7721DWVR | ISO7721DWVR |
| ISO7721FDWVR | ISO7721FDWVR |
| ISO7720FDWVR | ISO7720FDWVR |
| ISO7710FDR | ISO7710FDR |
| ISO7720DWVR | ISO7720DWVR |

Technical details of this Product Change follow on the next page(s).

| | | | | | | | |
|---|--|--------------------|---------------------------------------|---------------------|----------------|--|--|
| PCN Number: | 20250417000.1 | | | PCN Date: | April 21, 2025 | | |
| Title: | Adding TI Malaysia (MLA) as an additional Assembly site for select package devices | | | | | | |
| Customer Contact: | Change Management team | | Dept: | Quality Services | | | |
| Proposed 1st Ship Date: | July 20, 2025 | | Estimated Sample Availability: | June 20, 2025 | | | |
| *Sample requests received after June 20, 2025 will not be supported. | | | | | | | |
| Change Type: | | | | | | | |
| <input checked="" type="checkbox"/> Assembly Site | <input type="checkbox"/> | Design | <input type="checkbox"/> | Wafer Bump Material | | | |
| <input checked="" type="checkbox"/> Assembly Process | <input type="checkbox"/> | Data Sheet | <input type="checkbox"/> | Wafer Bump Process | | | |
| <input checked="" type="checkbox"/> Assembly Materials | <input type="checkbox"/> | Part number change | <input type="checkbox"/> | Wafer Fab Site | | | |
| <input type="checkbox"/> Mechanical Specification | <input type="checkbox"/> | Test Site | <input type="checkbox"/> | Wafer Fab Material | | | |
| <input type="checkbox"/> Packing/Shipping/Labeling | <input type="checkbox"/> | Test Process | <input type="checkbox"/> | Wafer Fab Process | | | |

PCN Details

Description of Change:

Texas Instruments is pleased to announce TI Malaysia (MLA) as an additional Assembly site for select devices in the SOIC package. Material differences between sites as follows.

| | Current | Additional |
|----------------|----------------|-------------------|
| Assembly Site | TI Taiwan | TI Malaysia |
| Wire diam/type | 0.96mil Au | 0.8mil Cu |

Test coverage, insertions, conditions will remain consistent with current testing.

Reason for Change:

Continuity of supply.

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

Impact on Environmental Ratings:

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

| RoHS | REACH | Green Status | IEC 62474 |
|---|---|---|---|
| <input checked="" type="checkbox"/> No Change |

Changes to product identification resulting from this PCN:

| Assembly Site | Assembly Site Origin (22L) | Assembly Country Code (21L) | Assembly City |
|----------------------|-----------------------------------|------------------------------------|---------------------------|
| TI Taiwan | TAI | TWN | Chung Ho, New Taipei City |
| TI Malaysia | MLA | MYS | Kuala Lumpur |

Sample product shipping label (not actual product label)

| | | | | | | | | | | |
|--|--------------|---|---|---|------------|--------------|--------------|-------------|-------------|--|
|  TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 20 MSL 2 / 260C / 1 YEAR SEAL DT MSL 1 / 235C / UNLIM 03/29/04 | |  |  | (1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483SI2 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CCO:USA (22L) AS0: MLA (23L) AC0: MYS | | | | | | |
| OPT: ITEM: 39 LBL: 5A (L)T0:1750 | | | | | | | | | | |
| Product Affected: <table border="1"> <tr> <td>ISO7710FDR</td> <td>ISO7720FDWVR</td> <td>ISO7721FDWVR</td> </tr> <tr> <td>ISO7720DWVR</td> <td>ISO7721DWVR</td> <td></td> </tr> </table> | | | | | ISO7710FDR | ISO7720FDWVR | ISO7721FDWVR | ISO7720DWVR | ISO7721DWVR | |
| ISO7710FDR | ISO7720FDWVR | ISO7721FDWVR | | | | | | | | |
| ISO7720DWVR | ISO7721DWVR | | | | | | | | | |

Qualification Data

Automotive Qualification Summary

(As per AEC-Q100 Rev. J and JEDEC Guidelines)

Approve Date 01-March-2024

Product Attributes

| Attributes | Qual Device: ISO7710QDRQ1 | QBS Package Reference: ISO6721BQDRQ1 | QBS Process Reference: UCC23513QDWYQ1 | QBS Package Reference: ISO6763QDWQ1 | QBS Package Reference: ISO5452DWR | QBS Package Reference: ISO7721QDRQ1 | QBS Package Reference: UCC21330BQDRQ1 |
|--------------------------|------------------------------|---|--|--|--------------------------------------|--|--|
| Automotive Grade Level | Grade 1 | Grade 1 | Grade 1 | Grade 1 | Grade 1 | Grade 1 | Grade 1 |
| Operating Temp Range (C) | -40 to 125 | -40 to 125 | -40 to 125 | -40 to 125 | -40 to 125 | -40 to 125 | -40 to 125 |
| Product Function | Interface | Interface | Power Management | Interface | Power Management | Signal Chain,Interface | Power Management |
| Wafer Fab Supplier | RFAB, RFAB | MHB, MHB | RFAB, RFAB | RFAB, RFAB | DP1DM5, DP1DM5, MHB | RFAB, RFAB | RFAB, RFAB, RFAB |
| Assembly Site | MLA | MLA | TAI | MLA | MLA | MLA | MLA |
| Package Group | SOIC | SOIC | SOIC | SOIC | SOIC | SOIC | SOIC |
| Package Designator | D | D | DWY | DW | DW | D | D |
| Pin Count | 8 | 8 | 6 | 16 | 16 | 8 | 16 |

QBS: Qual By Similarity

Qual Device ISO7710QDRQ1 is qualified at MSL2 260C

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

| Type | # | Test Spec | Min Lot Qty | SS / Lot | Test Name | Condition | Duration | Qual Device: ISO7710QDRQ1 | QBS Package Reference: ISO6721BQDRQ1 | QBS Process Reference: UCC23513QDWYQ1 | QBS Package Reference: ISO6763QDWQ1 | QBS Package Reference: ISO5452DWR | QBS Package Reference: ISO7721QDRQ1 | QBS Package Reference: UCC21330BQDRQ1 |
|---|----|--------------------------------|-------------|----------|-----------------|-----------|----------|------------------------------|---|--|--|--------------------------------------|--|--|
| Test Group A - Accelerated Environment Stress Tests | | | | | | | | | | | | | | |
| PC | A1 | JEDEC J-STD-020 JESD22-A113 | 3 | 77 | Preconditioning | MSL1 260C | - | - | No Fails | - | - | - | - | - |

| PC | A1 | JEDEC J-STD-020 JESD22-A113 | 3 | 77 | Preconditioning | MSL2 260C | - | - | - | - | No Fails | No Fails | No Fails | No Fails |
|---|----|-------------------------------------|-------------|----------|-------------------------------------|---|------------|---|---|---|---|---|---|---|
| HAST | A2 | JEDEC JESD22-A110 | 3 | 77 | Biased HAST | 130C/85%RH | 96 Hours | - | 3/231/0 | - | 3/231/0 | 1/77/0 | - | - |
| AC/UHAST | A3 | JEDEC JESD22-A102/JEDEC JESD22-A118 | 3 | 77 | Autoclave | 121C/15psig | 96 Hours | - | 3/231/0 | - | 3/231/0 | 1/77/0 | - | - |
| TC | A4 | JEDEC JESD22-A104 and Appendix 3 | 3 | 77 | Temperature Cycle | -65C/150C | 500 Cycles | - | 3/231/0 | - | 3/231/0 | 1/77/0 | 1/77/0 | 3/231/0 |
| TC-SAM | A4 | - | 3 | 3 | Post TC SAM | <50% delamination | - | - | 1/12/0 | - | 1/12/0 | - | 1/12/0 | 1/12/0 |
| HTSL | A6 | JEDEC JESD22-A103 | 1 | 45 | High Temperature Storage Life | 150C | 1000 Hours | - | - | - | 3/135/0 | 1/45/0 | - | - |
| HTSL | A6 | JEDEC JESD22-A103 | 1 | 45 | High Temperature Storage Life | 175C | 500 Hours | - | 3/135/0 | - | - | - | - | - |
| Test Group B - Accelerated Lifetime Simulation Tests | | | | | | | | | | | | | | |
| HTOL | B1 | JEDEC JESD22-A108 | 3 | 77 | Life Test | 125C | 1000 Hours | - | 3/231/0 | 3/231/0 | - | - | - | - |
| ELFR | B2 | AEC Q100-008 | 3 | 800 | Early Life Failure Rate | 125C | 48 Hours | - | - | 3/2400/0 | - | - | - | - |
| Test Group C - Package Assembly Integrity Tests | | | | | | | | | | | | | | |
| WBS | C1 | AEC Q100-001 | 1 | 30 | Wire Bond Shear | Minimum of 5 devices, 30 wires Cpk>1.67 | Wires | - | 3/228/0 | - | 3/90/0 | - | 1/30/0 | 3/90/0 |
| WBP | C2 | MIL-STD883 Method 2011 | 1 | 30 | Wire Bond Pull | Minimum of 5 devices, 30 wires Cpk>1.67 | Wires | - | 3/228/0 | - | 3/90/0 | - | 1/30/0 | 3/90/0 |
| SD | C3 | JEDEC J-STD-002 | 1 | 15 | PB Solderability | >95% Lead Coverage | - | - | 1/15/0 | - | - | - | - | - |
| SD | C3 | JEDEC J-STD-002 | 1 | 15 | PB-Free Solderability | >95% Lead Coverage | - | - | 1/15/0 | - | - | - | - | - |
| PD | C4 | JEDEC JESD22-B100 and B108 | 3 | 10 | Physical Dimensions | Cpk>1.67 | - | - | 3/30/0 | - | - | - | 1/10/0 | 3/30/0 |
| Test Group D - Die Fabrication Reliability Tests | | | | | | | | | | | | | | |
| Type | # | Test Spec | Min Lot Qty | SS / Lot | Test Name | Condition | Duration | Qual Device: ISO7710QDRQ1 | QBS Package Reference: ISO6721BQDRQ1 | QBS Process Reference: UCC23513QDWYQ1 | QBS Package Reference: ISO6763QDWWRQ1 | QBS Package Reference: ISO5452DWR | QBS Package Reference: ISO7721QDRQ1 | QBS Package Reference: UCC21330BQDRQ1 |
| EM | D1 | JESD61 | - | - | Electromigration | - | - | Completed Per Process Technology Requirements |
| TDOB | D2 | JESD35 | - | - | Time Dependent Dielectric Breakdown | - | - | Completed Per Process Technology Requirements |
| HCI | D3 | JESD60 & 28 | - | - | Hot Carrier Injection | - | - | Completed Per Process Technology Requirements |
| BTI | D4 | - | - | - | Bias Temperature Instability | - | - | Completed Per Process Technology Requirements |
| SM | D5 | - | - | - | Stress Migration | - | - | Completed Per Process Technology Requirements |
| Test Group E - Electrical Verification Tests | | | | | | | | | | | | | | |
| ESD | E2 | AEC Q100-002 | 1 | 3 | ESD HBM | - | 2000 Volts | 1/3/0 | 1/3/0 | 1/3/0 | - | - | 1/3/0 | 1/3/0 |
| ESD | E3 | AEC Q100-011 | 1 | 3 | ESD CDM | - | 500 Volts | 1/3/0 | 1/3/0 | 1/3/0 | - | - | 1/3/0 | 1/3/0 |
| LU | E4 | AEC Q100-004 | 1 | 6 | Latch-Up | Per AEC Q100-004 | - | 1/6/0 | 1/6/0 | 1/6/0 | - | - | 1/6/0 | 1/6/0 |
| ED | E5 | AEC Q100-009 | 3 | 30 | Electrical Distributions | Cpk>1.67 Room, hot, and cold | - | 1/30/0 | 3/90/0 | 3/90/0 | 1/30/0 | 1/30/0 | 1/30/0 | 1/30/0 |

Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Ambient Operating Temperature by Automotive Grade Level:

Grade 0 (or E): -40C to +150C

Grade 1 (or Q): -40C to +125C

Grade 2 (or T): -40C to +105C

Grade 3 (or I) : -40C to +85C

E1 (TEST): Electrical test temperatures of Qual samples (High temperature according to Grade level):

Room/Hot/Cold : HTOL, ED

Room/Hot : THB / HAST, TC / PTC, HTSL, ELFR, ESD & LU

Room : AC/uHAST

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

TI Qualification ID: R-NPD-2302-098

Qualification Data

Approve Date 06-February-2024

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

| Type | # | Test Name | Condition | Duration | Qual Device: ISO7721DWVR | Qual Device: ISO7720DWVR | QBS Reference: UCC23513QDWYQ1 | QBS Reference: ISO6763QDWWRQ1 | QBS Reference: ISO7721QDWVRQ1 | QBS Reference: ISO7720QDWVRQ1 |
|-------|----|-------------------------------|------------------------------|------------|--------------------------|--------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| HAST | A2 | Biased HAST | 130C/85%RH | 96 Hours | - | - | - | 3/231/0 | - | - |
| UHAST | A3 | Autoclave | 121C/15psig | 96 Hours | - | - | - | 3/231/0 | - | - |
| TC | A4 | Temperature Cycle | -65C/150C | 500 Cycles | - | - | - | 3/231/0 | - | - |
| HTSL | A6 | High Temperature Storage Life | 150C | 1000 Hours | - | - | - | 3/135/0 | - | - |
| HTSL | A6 | High Temperature Storage Life | 175C | 500 Hours | - | - | - | - | - | - |
| HTOL | B1 | Life Test | 125C | 1000 Hours | - | - | 3/231/0 | - | - | - |
| ELFR | B2 | Early Life Failure Rate | 125C | 48 Hours | - | - | 3/2400/0 | - | - | - |
| ESD | E2 | ESD CDM | - | 500 Volts | - | - | 1/3/0 | - | 1/3/0 | 1/3/0 |
| ESD | E2 | ESD HBM | - | 2000 Volts | - | - | 1/3/0 | - | 1/3/0 | 1/3/0 |
| LU | E4 | Latch-Up | Per JESD78 | - | - | - | 1/6/0 | - | 1/6/0 | 1/6/0 |
| CHAR | E5 | Electrical Distributions | Cpk>1.67 Room, hot, and cold | - | - | - | 3/90/0 | - | 1/30/0 | 1/30/0 |

QBS: Qual By Similarity

Qual Device ISO7721DWVR is qualified at MSL2 260C

Qual Device ISO7720DWVR is qualified at MSL2 260C

Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

TI Qualification ID: R-NPD-2303-095

In performing change qualifications, Texas Instruments follows integrated circuit industry standards in performing defect mechanism analysis and failure mechanism-based accelerated environmental testing to ensure wafer fab process, assembly process and product quality and reliability. As encouraged by these standards, TI uses both product-specific and generic (family) data in qualifying its changes. For devices to be categorized as a 'product qualification family' for generic data purposes, they must share similar product, wafer fab process and assembly process elements. The applicability of generic data (also known at TI as

Qualification by Similarity (QBS) is determined by the Reliability Engineering function following these industry standards. Generic data is shown in the qualification report in columns titled “QBS Process” (for wafer fab process), “QBS Package” (for assembly process) and “QBS Product” (for product family).

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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