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|--|--|---|---|--------------------------|---------------------|
| PCN Number: | 20220322001.1A | | PCN Date: | April 18, 2022 | |
| Title: | Qualification of Cu as an alternate bond wire for select devices | | | | |
| Customer Contact: | PCN Manager | Dept: | Quality Services | | |
| Proposed 1st Ship Date: | Jun 18, 2022 Jul 17, 2022 | Estimated Sample Availability: | Date provided at sample request | | |
| Change Type: | | | | | |
| <input type="checkbox"/> | Assembly Site | <input type="checkbox"/> | Design | <input type="checkbox"/> | Wafer Bump Site |
| <input checked="" type="checkbox"/> | Assembly Process | <input type="checkbox"/> | Data Sheet | <input type="checkbox"/> | Wafer Bump Material |
| <input checked="" type="checkbox"/> | Assembly Materials | <input type="checkbox"/> | Part number change | <input type="checkbox"/> | Wafer Bump Process |
| <input type="checkbox"/> | Mechanical Specification | <input type="checkbox"/> | Test Site | <input type="checkbox"/> | Wafer Fab Site |
| <input type="checkbox"/> | Packing/Shipping/Labeling | <input type="checkbox"/> | Test Process | <input type="checkbox"/> | Wafer Fab Materials |
| | | <input type="checkbox"/> | | <input type="checkbox"/> | Wafer Fab Process |
| PCN Details | | | | | |
| Description of Change: | | | | | |
| Revision A is to update proposed first ship date as shown above. | | | | | |
| This PCN is to inform of the qualification of an alternate bond wire qualification as follows: | | | | | |
| Current Bond Diameter | | Additional Bond wire & diameter | | | |
| Au, 1.0 mils | | Cu, 1.0 mils | | | |
| Reason for Change: | | | | | |
| Continuity of supply. 1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties 2) Maximize flexibility within our Assembly/Test production sites. 3) Cu is easier to obtain and stock | | | | | |
| 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 | <input checked="" type="checkbox"/> No Change | <input checked="" type="checkbox"/> No Change | <input checked="" type="checkbox"/> No Change | | |
| Changes to product identification resulting from this PCN: | | | | | |
| None | | | | | |

Product Affected:

| | | | |
|------------------------|----------------------|---------------------------|-----------------------|
| ADC08B200CIVS/NOPB | DP83816AVNG-EX/NOPB | DS15BR401TVSX/NOPB | DS92LV3241TVSX/NOPB |
| ADC08DL500CIVV/NOPB | DP83816AVNG/NOPB | DS90C124IVS/NOPB | DS99R101VS/NOPB |
| ADC08DL502CIVV/NOPB | DP83848IEVV/NOPB | DS90C124IVSX/NOPB | DS99R102VS/NOPB |
| ADC10DL065CIVS/NOPB | DP83848IEVVX/NOPB | DS90C124IVSX/S700237 3 | DS99R103TVS/NOPB |
| ADC12DL066CIVS/NOPB | DP83848IVV/NOPB | DS90C241IVS/NOPB | DS99R104TVS/NOPB |
| ADC12DL080CIVS/NOPB | DP83848IVVX/NOPB | DS90C241IVSX/NOPB | DS99R105VS/NOPB |
| CP3BT30VVAWQX/E7002123 | DP83848IVVX/S7002477 | DS90C241IVSX/S700237 4 | DS99R106VS/NOPB |
| CP3CN37VVAWQX/E7002124 | DS15BR400TVS | DS90C3201VS/NOPB | SCAN90004TVS/E5002593 |
| CP3CN37VVAWQX/NOPB | DS15BR400TVS/NOPB | DS90C3202VS/NOPB | SCAN90004TVS/NOPB |
| DP83640TVV | DS15BR400TVSX/NOPB | DS90LV004TVS | SCANSTA112VS |
| DP83816AVNG | DS15BR401TVS/NOPB | DS90LV004TVS/NOPB | |



TI Information
Selective Disclosure

Qualification Results

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

| Type | Test Name / Condition | Duration | Qual Device: ADC10DL065GYTZ | Qual Device: DP83816AVNJ8MY | Qual Device: DS90C241IVTSZ6 |
|------|--|-------------------------------|--------------------------------|--------------------------------|--------------------------------|
| AC | Autoclave 121C | 96 Hours | - | - | 3/231/0 |
| HTSL | High Temp Storage Bake 150C | 1000 Hours | - | - | 3/231/0 |
| MQ | Manufacturability (Assembly) | (per mfg. Site specification) | 3/Pass | 3/Pass | 3/Pass |
| TC | Temperature Cycle, -65/150C | 500 Cycles | 3/231/0 | 3/231/0 | 3/231/0 |
| THB | Biased Temperature and Humidity, 85C/85%RH | 1000 Hours | - | - | 3/231/0 |
| WBP | Bond Pull | Wires | 3/90/0 | 3/90/0 | 3/90/0 |
| WBS | Ball Bond Shear | Wires | 3/90/0 | 3/90/0 | 3/90/0 |

- QBS: Qual By Similarity
- Qual Device ADC10DL065GYTZ is qualified at LEVEL3-260CG
- Qual Device DP83816AVNJ8MY is qualified at LEVEL3-260CG
- Qual Device DS90C241IVTSZ6 is qualified at LEVEL3-260CG
- 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/>

Green/Pb-free Status:
Qualified Pb-Free(SMT) and Green

TI Qualification ID: 20191015-131891

For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

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