



**Material Declaration**  
Statement of Materials, Construction

Product: XRT91L34IV-F  
Package: 128L LQFP-TEP (14x14)

| Component     |               | Material         |                 |             | Material Weight % |             |
|---------------|---------------|------------------|-----------------|-------------|-------------------|-------------|
| Name          | Weight (mg)   | Element/Compound | CAS No.         | Weight (mg) | /Total Unit       | / Component |
| 1             | Die           | 8.9260           | Silicon         | 7440-21-3   | 8.9260            | 1.35 100.00 |
| 2             | Die Attach    | 1.4546           | Silver          | 7440-22-4   | 1.3237            | 0.20 91.00  |
|               |               |                  | Synthetic Resin | -           | 0.0436            | 0.01 3.00   |
|               |               |                  | Epoxy Resin A   | -           | 0.0436            | 0.01 3.00   |
|               |               |                  | Epoxy Resin B   | -           | 0.0436            | 0.01 3.00   |
| 3             | Heat Spreader | 125.2313         | AL              | 7429-90-2   | 116.2397          | 17.58 92.82 |
|               |               |                  | Al2O3           | 1344-28-1   | 8.9916            | 1.36 7.18   |
| 4             | Die Attach    | 3.9670           | Silver          | 7440-22-4   | 3.6100            | 0.55 2.88   |
|               |               |                  | Synthetic Resin | -           | 0.1190            | 0.02 0.10   |
|               |               |                  | Epoxy Resin A   | -           | 0.1190            | 0.02 0.10   |
|               |               |                  | Epoxy Resin B   | -           | 0.1190            | 0.02 0.10   |
| 5             | Mold Compound | 423.0360         | Silica Fused    | 60676-86-0  | 368.8870          | 55.79 87.20 |
|               |               |                  | Epoxy Resin     | -           | 31.7280           | 4.80 7.50   |
|               |               |                  | Phenol Resin    | -           | 21.1520           | 3.20 5.00   |
|               |               |                  | Carbon Black    | 1333-86-4   | 1.2690            | 0.19 0.30   |
| 6             | Lead Frame    | 93.9565          | Cu              | 7440-50-8   | 88.8716           | 13.44 94.59 |
|               |               |                  | Fe              | 7439-89-6   | 0.0940            | 0.01 0.10   |
|               |               |                  | Si              | 7440-21-3   | 0.6812            | 0.10 0.73   |
|               |               |                  | Mn              | 7439-96-5   | 0.0470            | 0.01 0.05   |
|               |               |                  | Ni              | 7440-02-0   | 3.0066            | 0.45 3.20   |
|               |               |                  | Zn              | 7440-66-6   | 0.4698            | 0.07 0.50   |
|               |               |                  | Mg              | 7439-95-4   | 0.1644            | 0.02 0.18   |
|               |               |                  | Ag              | 7440-22-4   | 0.4851            | 0.07 0.52   |
|               |               |                  | C               | 7440-44-0   | 0.0023            | 0.00 0.00   |
|               |               |                  | N               | 7727-37-9   | 0.0023            | 0.00 0.00   |
|               |               |                  | O               | 7782-44-7   | 0.0023            | 0.00 0.00   |
|               |               |                  | *Polyimide      | -           | 0.0879            | 0.01 0.09   |
|               |               |                  | *NBR            | 9003-18-3   | 0.0147            | 0.00 0.02   |
|               |               |                  | *Bismaleimide   | 79922-55-7  | 0.0147            | 0.00 0.02   |
| *Phenol Resin | 28453-20-5    | 0.0126           | 0.00 0.01       |             |                   |             |
| 7             | Plating       | 3.6370           | Tin             | 7440-31-5   | 3.6350            | 0.55 99.95  |
|               |               |                  | Impurity        | -           | 0.0020            | 0.00 0.05   |
| 8             | Wire          | 0.9920           | Gold            | 7440-57-5   | 0.9920            | 0.15 100.00 |
|               |               |                  | Impurity        | -           | 0.0000            | 0.00 0.00   |

Total Unit Weight: 661.2004

Component weight is based on homogenous material used to assemble the unit. | Composition derived from the material declaration from vendors.

**RoHS Certificate of Compliance**

This package is fully RoHS compliant. The table above shows that this package meets the following RoHS requirements for EACH PACKAGE COMPONENT.

RoHS 2 (Recast) 2011/65/EU | Fully Compliant

China RoHS | Fully Compliant

RoHS-6 | Fully Compliant

Non Use of PFOS & PFOA

REACH | Fully Compliant

| EU RoHS Restricted Substance                 | Allowable Limit (at homogenous material level) |
|--|--|
| Cadmium & its compounds (Cd)                 | 100 ppm (0.01 weight %)                        |
| Hexavalent Chromium & its compounds (Cr(VI)) | 1000 ppm (0.10 weight %)                       |
| Mercury & its compounds (HG)                 | 1000 ppm (0.10 weight %)                       |
| Polybrominated biphenyls (PBB)               | 1000 ppm (0.10 weight %)                       |
| Polybrominated diphenyl ethers (PBDE)        | 1000 ppm (0.10 weight %)                       |
| Lead & its compounds (Pb)                    | 1000 ppm (0.10 weight %)                       |



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Product: XRT91L34IV-F  
Package: 128L LQFP-TEP (14x14)

Halogen-free | Green

Dodd-Frank Wall Street Reform and Consumer Protection Act, July 21, 2010

We comply with this conflict metal free policy that restricts the use of those conflict metals, mining from the Democratic Republic of Congo (DRC) and it's adjoining countries. Exar will not accept product which uses these conflict metals from these areas. We require our suppliers to enforce this policy and be able to identify and verify from their sources of minerals are conflict free. Suppliers are required to report if they or any supplier through their supply chain use any of these conflict metals that are derived from certain conflict minerals originating in the DRC or an adjoining country. Exar Corporation is not aware of any conflict metals to be used in any of their products.

Flammability rating of UL 94-V0

MSL Pb-Free: L4 @ 250°C

Chiew Mee Foo, QA Manager

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