LAYOUT:

TECHNICAL DATA:

- Flip Chip Silicon Die
- dummy component with two nested daisy chains, allowing
  - easy measurement of short cuts between adjacent contacts
  - advanced reliability tests with voltage applied between adjacent pads
- 4 Kelvin sensing structures for 4-point probe contact resistance measurement
- fiducial marks for automated placement
- design size 4.75 mm x 4.75 mm with 100 µm dicing street
- aluminium pads 110 µm x 110 µm
- octagonal opening passivation 90 µm
- contact pitch 250 µm
- custom specific wafer thickness
- pad modifications with electroless NiAu, stud bumping and solder available
TECHNICAL INFORMATION:

- **designed chip size**: 4.75 mm x 4.75 mm
- **die pitch**: 4.85 mm x 4.85 mm
- **typical die size after dicing**: 4.80 mm x 4.80 mm
  - other geometries, e.g. 4x4 dies available on request
- **wafer thickness**: 725µm, other thicknesses available on request
- **pad layout**: 72 pads, two nested daisy chains with 250µm pitch and
  - 4 Kelvin sensing structures for contact resistance measurement
- **pad geometry**:
  - aluminum: 110µm x 110µm (square)
  - passivation opening: 90µm x 90µm (octagonal)
- **pad metal**: 1.4 µm AlCu0.5
- **passivation**: PECVD: 300 nm LTO + 800 nm SiN
- **optional pad modifications**: solder bumps, stud bumps, electroless NiAu
- **delivery**: 8" wafer, 1100 dies FC475DDC + 6 dies FC475, diced on tape
- **normal uses**: High throughput die and flip chip placing from wafer feeder,
  - automatic wire bonding, encapsulation and underfill processes.
  - Reliability tests with voltage applied between adjacent pads.
- **typical technologies**:
  - wire bonding
  - stud-bump bonding
  - solder flip chip
  - anisotropic conductive adhesive flip chip (ACA / ESC5)
  - isotropic conductive adhesive flip chip (ICA)
- **available substrates**: Substrates may be designed on request
- **contact**
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- **geometry variations**: Arbitrary customer-specific layouts including a company's logotype can be realised on 8" glass and silicon wafers.

* Specifications subject to change without notice.