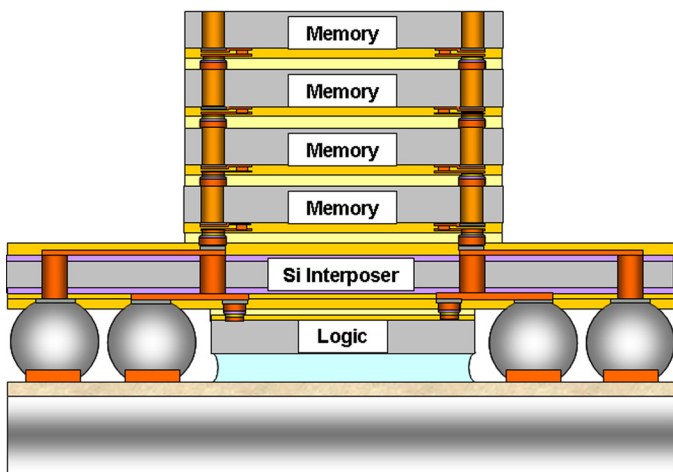


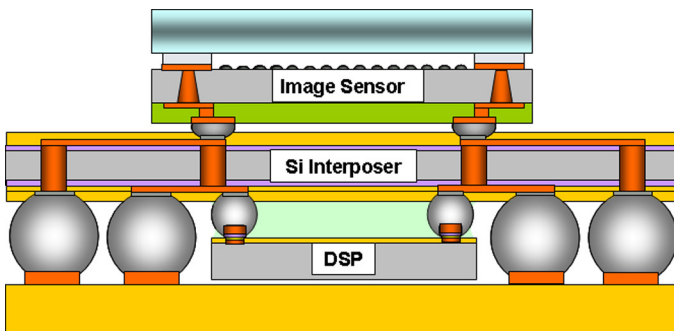
# DuPont Wafer Level Packaging Solutions

## Providing Integrated Materials for Wafer Level Packaging and Three Dimensional (3D) and Through Silicon Via (TSV) Applications

DuPont is connecting science and technology from across the company to design integrated wafer level packaging (WLP) solutions for both current and emerging WLP requirements. For WLP, 3D/TSV applications, we offer the following:



DuPont WLP Solutions offers you more freedom to design stacked chip constructions, such as TSV/SIP Memory Logic.



In TSV image sensors, DuPont WLP Solutions products are essential to enable high yields for designs that deliver superior reliability and strength in drop tests.

### TSV Materials

#### MX Series

dry film photoresist for TSV creation/filling

#### CoppeReady®

copper CMP slurry

#### Vertrel®

specialty fluids for cleaning

#### CoolLam™

thermal substrates

#### Teflon® AF

optical coatings

#### EKC Series

post CMP cleaners, photoresist & residue removers

#### Syton® & Mazin™

colloidal silica slurries for back grinding/wafer polishing

#### Zyron®

electronic gases for TSV etching

#### Kapton®

polyimide films for flexible substrates

### Bonding Materials

#### PerMX™ Series

photodielectric dry film adhesive

#### EKC Series

pre bonding Benzotriazole (BTA) and Copper Oxide cleaner

#### HD-3000/HD-7000 Series

wafer level polyimide adhesive/underfill

### Fan Out & RDL Materials

#### PerMX™ Series

photodielectric dry film adhesive

#### HD Series

polyimide & PBO photoimageable coatings

### Bumping/ Pillar Materials

#### WB Series

dry film photoresist wafer bumping

#### EKC Series

dry film photoresist removers

For more information on DuPont Wafer Level Packaging materials, please visit:

[wlpolutions.dupont.com](http://wlpolutions.dupont.com)

*The DuPont Oval logo, DuPont™, The miracles of science™ and all products, words or phrases denoted with™ or © are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates ("Trademarks"). The Trademarks may not be used in connection with any product or service that is not a product or service of DuPont or its applicable affiliates. The Trademarks may only be used under a license granted by DuPont or its applicable affiliates.*

*Information contained in this document corresponds to our current knowledge on the subject and may be subject to revision as new knowledge and experience becomes available. It is offered solely to provide possible suggestions for your own evaluations. It is not intended, however, to substitute for any evaluations or testing that you may need to conduct to determine for yourself the suitability of our products for your particular purposes or applications. Since we cannot anticipate all variations in actual end-use conditions, DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.*

*Caution: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement: H-51459 or H-50102-2"*



*The miracles of science™*