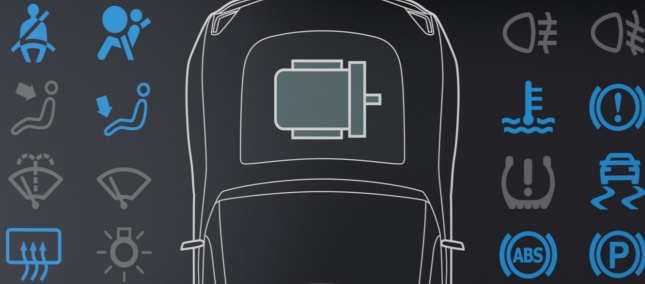


10:45 am

Home Summary **Media** Power Remote

System control



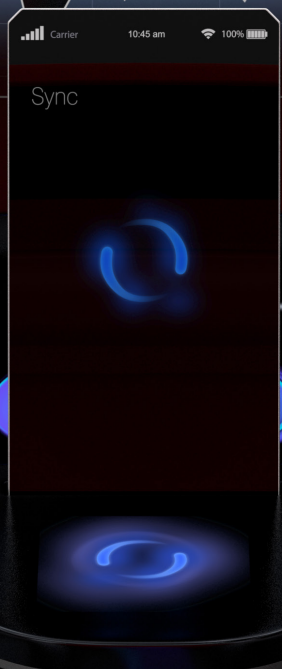
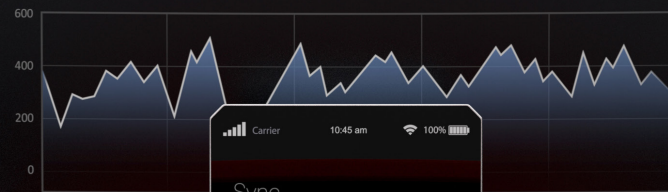
Battery 110kWh



Range km



Energy consumption



SunTronic In-Mold Electronics Materials

Experience. Transformation.

SunChemical®

a member of the DIC group



In-Mold Electronics (IME) is a revolutionary new way of integrating electronics into plastics. It opens up immense possibilities for product designers and electronics manufactures to create 3D contoured smart electronic surfaces. IME enables the production of ergonomic, lightweight and durable parts through cost-effective manufacturing processes requiring less assembly and fewer moving parts.

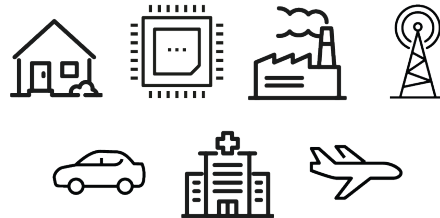
As a long-time supplier into In-Mold Decoration (IMD) and Film-Insert Molding (FIM) applications, Sun Chemical is well positioned within the value chain for appliances, automotive, industrial and medical electronics markets. With the new generation of SunTronic IME inks, you can now integrate electronic functionality into IMD/FIM applications using best-in-class electronic materials that can withstand even the harshest conditions of the injection molding process.

Key Attributes and Benefits:

- SunTronic IME materials are optimized for various applications, including automotive, appliances, consumer electronics, wearables and medical devices.
- Conductive IME silver inks deliver best balance between electrical performance and 3D formability as well as cost-effectiveness and direct over-molding capabilities.
- IME dielectric inks have excellent formability and insulation reliability
- SunTronic IME inks can be used in combination with IMD graphic inks to create fully decorated plastic parts with integrated electronics functionality
- Sun Chemical delivers extensive technical expertise with the individual process steps for IME and proven capability to optimize ink stacks that can meet even the most challenging 3D forming and circuit design requirements.

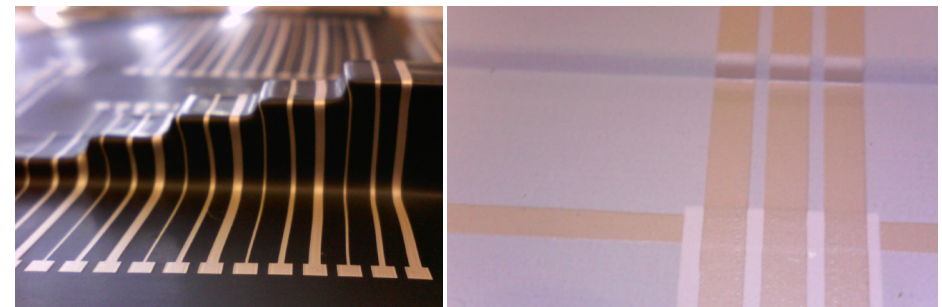
Major Applications:

- Touch switches for HMI (human-machine interface)
- Heaters (de-fogging, de-icing, automotive interior)
- LED back-lighting
- Antennae and connectivity
- Sensors (proximity, gesture detectors)
- Shielding and EMI (electro-magnetic interference) applications



Product Type	Product Name	Features
Conductive Silver*	AST6800HC	Low electrical resistance, 10-12 mOhms/sq/mil, mild 3D forming, good for interconnects, antenna and heaters
	AST6800HF	High 3D formability, 30-35 mOhms/sq/mil, excellent screen stability (down to 100 um resolution)
Dielectric/Passivation	DST4000W	Formable white dielectric ink for cross-over insulation, excellent resistance to silver migration. Used for multilayer circuitry
	DST4000TC	Formable transparent clear for barrier layer between graphic and electronic inks, adhesion tie coat for adhesion to PC resins
Conductive Carbon/Graphite	GST4700	Excellent scratch resistance, good for connector pads protection and preventing silver

* Resistivity and 3D forming can be customized based on project requirements, 10mOhms/sq/mil to 100 mOhms/sq/mil is possible



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