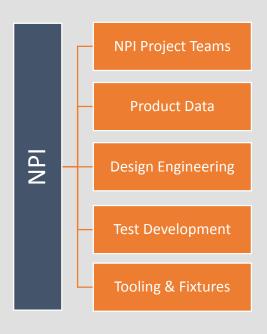


### Focus: New Product Introduction (NPI) - Industrialization

The NPI stage is one of the most critical stage in the phase of industrialization. Our experienced NPI team coordinates & documents the introduction of new and re-introduced products. In this stage, we ensure that all major incompatibilities are discovered and adequate feedback and actions are undertaken, so our Customers can benefit from shorter time-to-market, higher quality and potential cost-efficiencies.



#### Reliable NPI Process

- Dedicated NPI Project teams
- NPI Project Management software
- Design Engineering services
- DFM analysis
- CAD/CAM 3D modelling
- Various Tooling design & build
- Alternate / Obsolete Management
- Functional Test Development
- ICT test fixture development
- Product-certification implementation (eg. CCC, UL, TUV)



ISO 9001: 2008 ISO 14001: 2010

ISO 22301: 2013

Assel is a reliable and flexible contract manufacturing provider, offering electronics assembly, as well as production solutions, that integrate cable, electronics, mechanical & non-electronic parts: from sub-assembly's to fully tested finished products. All our operations are supported by sophisticated software solutions and continuous improvement programs.





## Focus: New Product Introduction (NPI) - Industrialization

### **General Information**

- Key Information on New Product Introduction Projects
  - Thousands of successfully new product implementations (PCBA & Box Build)
  - Dedicated NPI project managers & experienced process engineers (electronics/mechanical)
  - Green and Black Belt Lean/Six Sigma engineers / IPC-A-610E trained
  - Full support in the industrialization stage, based on Customer needs

#### Product Data Management

- Product Data analysis (verification of documentation)
- Obsolete / End—of-Life component analysis
- Work Instruction based on Product documentation & process requirements
- Sourcing of alternative components

#### Process & Quality Tools and Equipment

- Preparation Dedicate NPI project management software with direct communication to ERP
- Process Flows & Control Plans, PPAP and other Quality Tools
- Design for Manufacturability (DFM) analysis
- Program preparation: Screen Printing, Pick & Place, Radial/Axial, SPI, AOI, IC Programming
- Reflow/Wave Profile preparation (KIC 2000 technology)
- Test Development & Test process preparation and engineering
- Traceability & History management
- Extensive post-NPI reports with FMEA/PFMEA analysis, improvement suggestions with critical cost & quality areas
- After-NPI process optimization & continuous improvement





# Focus: New Product Introduction (NPI) - Industrialization

- Tooling & Fixtures
  - Design & construction of various complex tooling for PCBA and Final Assembly processes, eg.
    - o SMT tooling design & build, eg. stencils
    - o Wave solder pallets design & build
    - o Specific tools and jigs for PCBA assembly processes
  - ICT Fixtures design & build
  - Box Build / Systems Integration jigs &

#### Software Solutions

- Dedicated Secure Product Data Management database with direction connection to ERP
- Dedicated NPI project management software with direct communication to ERP
- Valor vPlan (Mentor Graphics)
- View Mate Pro
- Lab View
- Autodesk Inventor Professional 2014
- AutoCad

