

NEWS AND HIGHLIGHTS ON smthybridpackaging 2018

Tools for Design & Verification



DfT & Test Coverage Analysis from **Aster Technologies** (Lars/Jussi)

- ✓ *Early Design for Test, Coverage analysis and even measurement/QA*

Ask for meeting



Quick Instruments from **Testonica Lab** (Lars/Jussi)

- ✓ *Populating existing on-board FPGAs converting them temporarily into a fully automated on-board embedded tester.*

Ask for meeting



Embedded JTAG Solutions from **GÖPEL electronic** (Lars /Jussi)

- ✓ *Fast and easy verification, debug & programming of prototypes*
- ✓ *Embedded Instrument IPs for embedded test and measurement*

4A-222



Probes from **Everett Charles Technologies (ECT)** (Michael/Knud/Jussi)

- ✓ *For General Purpose, High Current, High Frequency ... you name it, ECT has it*

Ask for meeting



Fixtures from **Everett Charles Technologies (ECT)** (Michael/Knud/Jussi)

- ✓ *Kits, Customized, Manual Operated, In-Line ... you name it, ECT has it*

Ask for meeting



2D/3D X-ray from **BHGE (phoenix x-ray)** (Knud/Michael/Jussi)

- ✓ *High-resolution microfocus/nanofocus X-Ray inspection system*
- ✓ *3D computed tomography scans within 10 seconds*
- ✓ *Offset | scan to scan bigger parts or the same size parts with higher resolution*

Ask for meeting







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Machines & Tools for Manufacturing

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|---|---|
|  | <p>Bonding Machines from Hesse (Arne/Knud) 4-341</p> <ul style="list-style-type: none"> ✓ <i>Bondjet BJ855 - High speed fully automatic fine Wire Bonder</i> ✓ <i>Bondjet BJ959 - Heavy Wire Bonder with automatic handling system</i> |
|  | <p>Pick and Place Machines from Hanwha Techwin (former Samsung SMT) (Arne/Knud) 4A-318</p> <ul style="list-style-type: none"> ✓ <i>Come and see all the exiting Pick&Place news!</i> |
|  | <p>Adhesive Bonding, Dispensing & Potting from Scheugenpflug (Arne/Knud) Ask for a meeting</p> <ul style="list-style-type: none"> ✓ <i>New system solution: Potting of high-voltage batteries</i> |
|  | <p>Laser Applications, Mounting, Routing or Final Assembly from OSAI (Arne/Knud) 5-220</p> <ul style="list-style-type: none"> ✓ <i>NeoMark Easy - with laser (CO2 - Green - Nd:YAG - Fiber)</i> ✓ <i>NeoCut Shape - with new ultrafast laser</i> |
|  | <p>Selective Soldering Systems from Inertec (Arne/Knud) 4-125</p> <ul style="list-style-type: none"> ✓ <i>CUBE.460 with a mini wave module</i> ✓ <i>New modular system CUBE Inline+ with an ActiveFlow module</i> |
|  | <p>Vapour Phase Soldering from exmore (Arne/Knud) Ask for meeting</p> <ul style="list-style-type: none"> ✓ <i>VS500 - renewed with Sigmatek PLC and HMI with Swipe technology</i> |
|  | <p>Welding on Electronics from C-Welding (Arne) Ask for meeting</p> <ul style="list-style-type: none"> ✓ <i>Welding batteries, components on wire and a lot more</i> |
|  | <p>Thermal Profiling Solutions from Solderstar (Arne/Knud) 4-439</p> <ul style="list-style-type: none"> ✓ <i>Better solder process control – Better solder quality with traceability</i> |
|  | <p>High-end Rework from Zevac (Arne/Lars) 4-361</p> <p>ONYX Milling</p> <ul style="list-style-type: none"> ✓ <i>Very precise mechanical removal of SMD parts surrounded with underfill</i> ✓ <i>Without any impact of heat</i> |
|  | <p>Extraction and Filtration Technologies from ULT (Arne/Lars) 5-212</p> <p>ULT 200 unit series - Renewed conceptionally, technically and with unrivalled benefits!</p> <ul style="list-style-type: none"> ✓ <i>Ideal extraction performance even with several capturing elements attached</i> ✓ <i>Extremely wide accessories range</i> |
| SIEMENS | <p>Manufacturing Execution Solution from Siemens (Arne/Lars) 4-541/5-434</p> <p>Smart manufacturing for electronics</p> <ul style="list-style-type: none"> ✓ <i>DFM & NPI software for assembly and test of PCBs MES for PCB & device manufacturing</i> ✓ <i>Manufacturing Control and IoT Connections Business Intelligence and Advanced Analytics</i> |
|  | <p>Track, Trace & Control Systems from Cogiscan (Arne/Lars) Ask for meeting</p> <ul style="list-style-type: none"> ✓ <i>Optimizing your entire production process and provides traceability</i> |

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Systems for Quality Assurance & Test

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|---|---|
|  | <p>SPI from GÖPEL electronic (Michael/Knud) 4A-222</p> <ul style="list-style-type: none"> ✓ <i>Very fast, world leading, innovative Dual 3D image Capturing Technology</i> ✓ <i>Functions for testing of sinter pastes and Direct Copper Bonded (DCB) substrates</i> |
|  | <p>3D-AOI from GÖPEL electronic (Michael/Knud) 4A-222</p> <ul style="list-style-type: none"> ✓ <i>The only 2D, Angle View and 3D system Shadow Free without compensation</i> |
|  | <p>THT-AOI from GÖPEL electronic (Michael//Knud) 4A-222</p> <ul style="list-style-type: none"> ✓ <i>Simultaneously inspection from both sides of the PCB</i> ✓ <i>One machine for pre-solder and post-solder inspection</i> ✓ <i>New! Now also with telecentric and angle view cameras for top-side inspection</i> |
|  | <p>In-Line AXI from GÖPEL electronic (Michael/Knud) 4A-222</p> <ul style="list-style-type: none"> ✓ <i>Combined Dual side 3D x-ray and 2D AOI system inspection in one go</i> ✓ <i>StingRay Detector for maximum PCB layer separation</i> |
|  | <p>Fixtureless In-Circuit Test (ICT) Flying Probe test from Takaya (Lars/Jussi) 4A-340</p> <ul style="list-style-type: none"> ✓ <i>The world's fastest fixture-less in-circuit test system – now also dual-sided</i> |
|  | <p>Probes from Everett Charles Technologies (ECT) (Michael/Knud) Ask for meeting</p> <p><i>For General Purpose, High Current, High Frequency you name it, ECT has it</i></p> |
|  | <p>Fixtures from Everett Charles Technologies (ECT) (Michael/Knud) Ask for meeting</p> <ul style="list-style-type: none"> ✓ <i>Kits, Customized, Manual Operated, In-Line you name it, ECT has it</i> |
|  | <p>Test Coverage Measurement from Aster Technologies (Lars/Jussi) Ask for meeting</p> <ul style="list-style-type: none"> ✓ <i>Optimize your test coverage & redundancy – Now with system level viewer</i> ✓ <i>Helps you reducing the risk of errors escaping your quality control</i> |
|  | <p>Quick Instruments from Testonica Lab (Lars/Jussi) Ask for meeting</p> <ul style="list-style-type: none"> ✓ <i>Populating existing on-board FPGAs converting them temporarily into a fully automated on-board embedded tester.</i> |
|  | <p>Embedded JTAG Solutions from GÖPEL electronic (Lars/Jussi) 4A-222</p> <ul style="list-style-type: none"> ✓ <i>Economical manufacturing test solutions for board level test and programming</i> |
|  | <p>2D/3D X-ray from BHGE (phoenix x-ray) (Knud/Michael/Jussi) Ask for meeting</p> <ul style="list-style-type: none"> ✓ <i>High-Resolution Microfocus / Nanofocus X-Ray Inspection System</i> ✓ <i>3D computed tomography scans within 10 seconds</i> ✓ <i>Offset scan to scan bigger parts or the same size parts with higher resolution</i> |