



Yelo Overview 2022

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EPIC
Packaging & Test

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Proprietary to Yelo



- Design & Manufacture of Burn-in & lifetest equipment



Y1000
Low Power
Series



Y4000
Low Power
Series



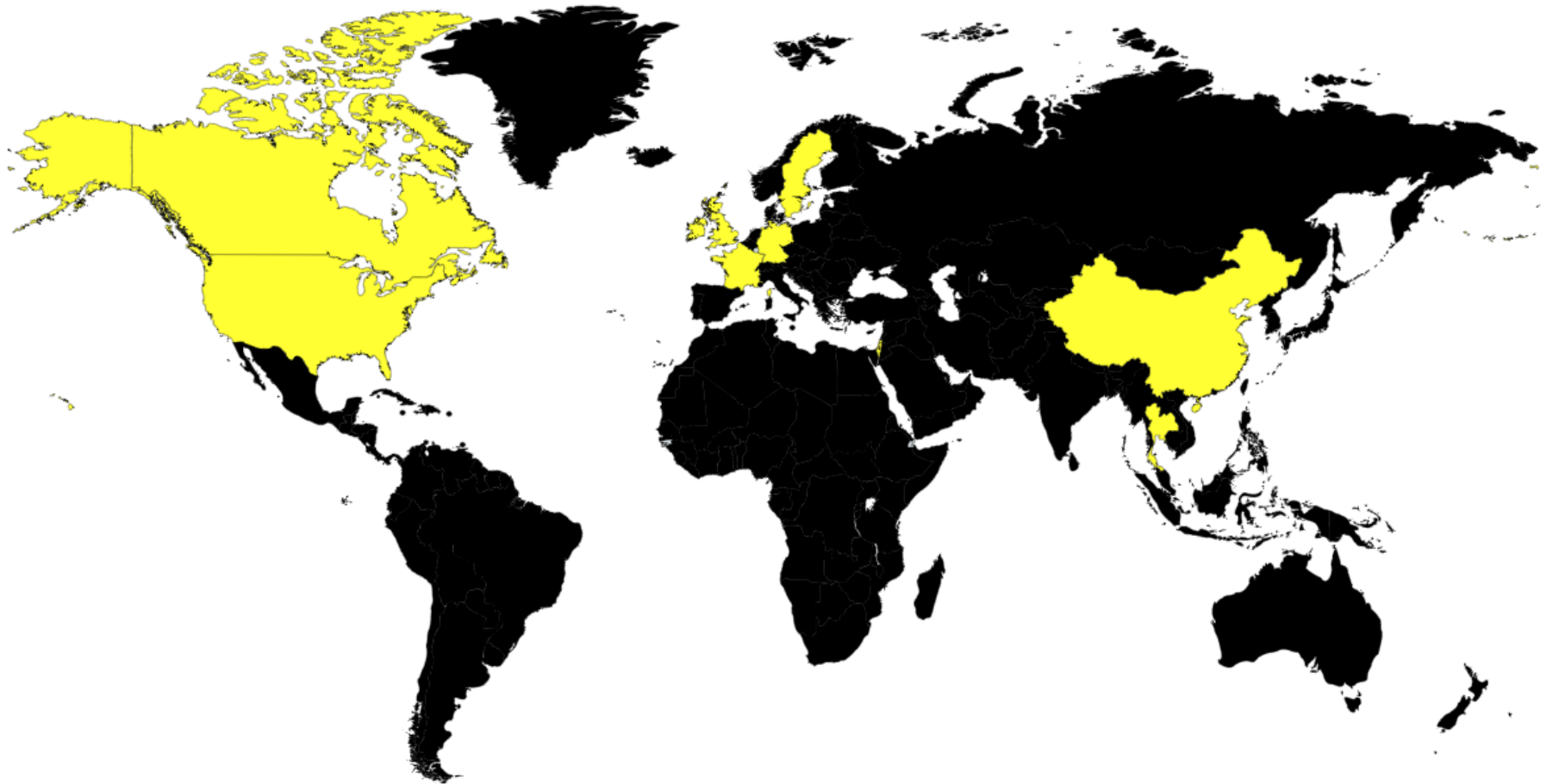
Y2500
High Power
System



Characterisation
System



Yelo International Footprint



- Happens during device development
- Needed to prove long term reliability (Telcordia)
- Wafer qualification
- Test a representative sample of devices
- Used to find “sweet spot” for future burn-in (at what current and temperature device will wear out)
- Optical degradation of the laser diode is observed and recorded by precisely measuring changes in the laser's operating characteristics during the test.

- Identify and remove defective devices
- Infant mortality failures are often caused by defects introduced during the manufacturing process
- Stress the laser diode crystal structure using higher than normal operating current and operating temperature
- Typical soak temperature ranges from 85° C to 150° C and typical current ranges are 50-150% of the normal operating current

When is burn-in & life test done?



- CoC format is the earliest step between wafer and package
- wafer level probing challenges remain



Questions ?