

Tool ID LASER1 (TIN9001)

a. General

| Cat | Description |
|--------------------------------------|-----------------------------------|
| Vendor / Supplier | IPG Microsystems |
| Model | IX-280 (ML194-15-A16544) |
| Process | Fiber Laser Micromachining System |
| Vintage (Year of Manufacture) | 2015 |
| Serial No. | 34829 |
| Asset Description | |
| Tool Status | Bagged & Skidded In Warehouse |
| Software Version | 4.20.7199 |
| CIM | N/A |

b. Hardware Configuration (Fab)

| Cat | Description | Qty / Units | Status,tick if ok[✓] |
|-----------------------|--|-------------|-----------------------|
| Main System | Main System | 1 | ok[✓] |
| | | | |
| SMIF System | Non- SMIF | | |
| | Tool is setup for 300mm Square substrates | | |
| Handler System | none | | |
| | | | |
| Options | Bright Field Option | 1 | ok[✓] |
| | Backside Contamination Option (Edge Handling System + Flipper Aligner) | 1 | ok[✓] |
| | E84 Standart for Overhead Loadsystem | 1 | ok[✓] |

c. Hardware Configuration (Subfab / Auxilliary Units)

| Sub Accessories / Auxilliary Units | Qty / Units | Status,tick if ok[✓] |
|------------------------------------|-------------|-----------------------|
| | | |
| | | |

d. Missing/Faulty Parts / Accesories List

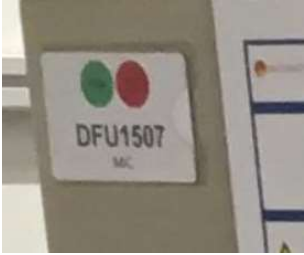
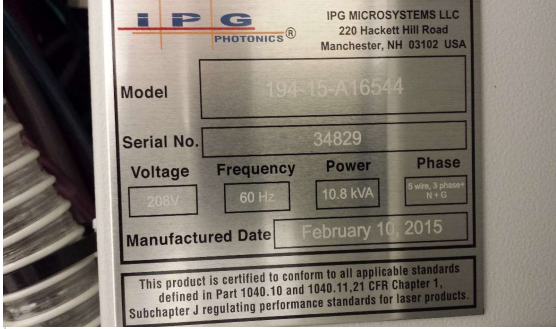
(If NO missing/faulty parts/accessories please indicate NA)

| Description | Qty / Units |
|-------------|-------------|
| NA | |

Tool Photos (Photos must make sense to show all the major parts intact)

Tool ID : DFU1507
Date : 12.04.2018

a. General

| Description | Photos |
|---|---|
| <p>Eqpt ID</p> |  |
| <p>Vendor / Supplier / Model INCLUDE A PHOTO OF THE SERIAL NUMBER TAG THAT IS AFFIXED TO THE TOOL.</p> |  |

b. Hardware Configuration (Fab)

| Description | Photos |
|---------------------------|--|
| <p>Main System</p> |  |
| <p>Chambers</p> |  |

Equipment Configuration

| Eqpt ID | LASER1 (TIN9001) |
|---|----------------------------|
| Tool Status | Bagge & Skidded |
| Components | |
| IX-280-ML Workstation | |
| IPGM Beam Delivery System (BDS) | |
| - Fixed Beam Configuration for High Speed Drilling Applications | |
| Galvo Configuration for Direct Write / Picosecond applications | |
| Microtech Camera | |
| - High Magnification Inspection / Alignment Camera | |
| - Low Magnification Process Camera | |
| X-Y, Z-Theta stages | |
| Internally Mounted IPG QCW Laser Optimized for High Speed Hole Drilling | |
| Internally Mounted IPG YLPP Picosecond IR Laser for Research and Development Activities | |
| PC Control Software | |