EQUIPMENT DETAILS and Test report:
Asset Details
Show available actions
Description
Tool config is based on original PO, please verify tool details at tool inspection
Machine:
Type: 400F
Manufacturing Date 5/1/2007
Installation Status: Installed - In Production
Expiry date: No date

Configuration Items:
Track Pre-warning signal (APR): APR enabled
Avoid Track INPUT/OUTPUT conflicts, Raise AS after APR: Avoid Track INPUT/OUTPUT
conflicts enabled
Active wafer release for dry WS: FALSE
Closing disk type: No closing disk present
Safeguard to prevent loading of reticles with too wide or mispositioned pellicles: Disabled
Continuous clampable wafer table for dry WS: Absent
Type of wafertable on chuck 2 for immersion machine: Zerodur version 1
Type of wafertable on chuck 1 for immersion machine: Zerodur version 1
WS Immersion throughput package: None
WS Immersion thermal control package: None
extended docking interface at Prealigner: ECC_0MM
Wafer Stage Configuration: Wafer Stage type 3 configuration
Wafer Carrier Location: Right
Wafers per Carrier: 25
Wafer Mark Sensor: Absent
Wafer Id Reader: Absent
Wafer Size: 300mm
Wafer Track: Present
Wafer Stage Type: Dual Chuck
Wafer Stress Relaxation: FALSE
Lower Docking Plate: Present
WS Balance Mass: Stainless Steel
WH Robot Power Amplifier: CPM 20

Wafer Stage Fast Stiff X Move Electronics: Present
Wafer Stage Mirror Block Down Electronics: Absent
Universal Prealignment: Disabled
Interferometer axis version at exposure: 3 plus 1 axis
Wafer Handling Pneumatics: Standard
Wafer Switch: Absent
Chuck 1 wafer size: 300mm
Chuck 2 wafer size: 300mm
Type of immersion hood for immersion: None
Specifies chuck1 layout relev. for Immersion: Chuck does not support immersion
Specifies chuck2 layout relev. for Immersion: Chuck does not support immersion
Specifies chuck1 config: Dry
Specifies chuck2 config: Dry
Specifies chuck1 version: not specified
Specifies chuck2 version: not specified
Changed Short Stroke diff XY controller: Disabled
Docking wheels at WH unload: Absent
Docking plate height: Low
Immersion Hood version: Absent
Carrier Handler Type: Mark II 300 Foup
Wafer Handling Load Robot Type: Double Fold Arm, 12 mm Z stroke
Wafer Handling Unload Robot Type: Double Fold Arm, 12 mm Z stroke
Wafer Handling Store Unit: Absent
Wafer Handler wrt BF Shifted in Z: Not Shifted
Integrated Reticle Inspection System Clipped Status: PPD2_1 System;
Reticle streaming lite: Disabled
Enhancements in Reticle Monitor: no enhancements
Reticle streaming: Disabled
Improvements for reticle handling: Disabled
Extend IRIS maximum particles scanned to 50000.: Absent
Zeroing type for Encoders Measurement System: Using reference marks on the encoder
scales
Reticle Stage Chuck Type: Magn. Grav. Comp. Changed Lens Top
Reticle Stage Chuck Type: TYPE_4
Nitrogen purging of Reticle Stage: RS is not purged
Reticle Carrier Location: Right
Integrated Reticle Inspection System: PPD1 with IRIS1 functionality.

Integrated Reticle Library: IRL with original functionality
Reticle Size: 6 inch
Reticle Carrier Tag Reader: Present
Reticle Stage Long Stroke Motor Type: Cobalt Ferro 18 teeth
Reticle Stage Long Stroke Config: TYPE_5
Automated Reticle Transport System: Absent
Reticle Stage Lenscooler Box: Lenscooler Box with anti-aliasing Filter
Maximum Reticle ID Length: 24 Characters
Reticle Stage Measurement System on Scan: Heidenhain Encoders
Relative direction of ws to rs on the X axis: Same
RS Object Field: Normal
Reticle exchange type: Retex option
Iris feature Scan: Absent
Reticle Handler type: RH Mark III
2D Barcode Reader: Absent
Integrated Reticle Inspection System Configuration.: Disable creation of OSIRIS viewable
files.
Settle time reduction to improve the throughput:
Scan speed increase to improve the throughput:
WS Immersion Hood Only Testrig: Absent
Version of RS/WS IO library: Version 1
Dynamic Performance Calculation: Mark 1
Stages Sample Rate: 5.0 kHz
Interferometer Electronics: Ifsr
Capacitive z-height sensor type.: Extended Z sensor board
Ifm config at measure side.: 7 axes
UV Shutter Optimized Open Time: Optimized UV Shutter Open Time V2
DoseSystemPerformanceTest sequence: Test sequence 0
PEP-ADC Intensity: Disable PEP-ADC Intensity;
Online Lamp Peak: Disable Online Lamp Peak;
Dose Intensity Optimization: Disable Dose Intensity Optimization;
Laser Gas Life eXtension: Disable Laser Gas Life eXtension;
Type of multi foil lens element: none
Depolarizer type: not applicable
PSE Location: not applicable
PCE Location: not applicable
Intensity Calibration Per DOE: Disabled

Pupil qualification method: Centre of gravity method
Polarized illumination amorph DOE.: Only unpolarized illumination.
Fresnel corrections for WSSS: Disabled
Is NA accuracy measurement allowed?: Disabled
Exchangeable Pupil Lens Element: No EPLE
Multifunction Active Lens Element: 0
Multifunctional Active Elements: 0
Use Sigma Calibration: no Sigma Calibration
Use Sigma WIP Preserving Offsets: no Sigma WIP Preserving Offsets
THFFC FDE model lens dependent: Disabled
BALE Type: Don't Care
TIS diffuser: TIS diffuser absent
Determination of NA ellipticity: Disabled
XML output for LITHOGUIDE: Disabled
Use validity ranges around UIP data when Enabled.: Use exact matching for UIP data
Number of EXLE elements: 0
Functional use of Active Elements: No AE element
Polarization Shaping Element Retractor: No PSER hardware installed in the machine
Method for alignment of the laser beam: Not applicable for UV systems
Pupil TIS angular sensitivity calibration and correction: TIS Pupil Measurement will not be
improved
Describes at what plane the BMU measures: Not applicable for uv systems
Lens Type: 41
Light-source Architecture: HG Lamp
Light-source Type: Lamp
Light-source Wave-length: 365nm
DOSEMAPPER: Absent
DOSE_MAPPER_1: Absent
REMA architecture: REMA C
Illuminator Type: 39
Zoom Axicon Architecture: ZA
Zoom Axicon Type: 39
NA Control Architecture: NA2 Torlon
NA Control Type: 39
Automated DOE Exchanger: Absent
Automated DOE Exchanger Architecture: 5 slots MIP Control
UNICOM: Absent

UNICOM Architecture: 1 Motor
Test Table: Absent
Imaging Electronics Architecture: B Architecture
Attenuator Type: Discrete 16 Transmissions
Test Table Z Axis: Worm Wheel
PUPICOM: Absent
PUPICOM Architecture: DC Motor
Number of Z Lens Manipulators: 2
Number of Active Lens Elements: 0
Number of Bi-directional Active Lens Elements: 0
Number of Active Manipulator Elements: 0
Number of Active Elements: 0
Number of Half Dome Mirrors: 0
Number of Semi-Active X-Y Lens Manipulators: 0
Setup sensor board version: Setup SSD not available
Imaging Generic Power Amplifier: Ten Axis Power Amplifier
Imaging Control Rack Configuration: IMCR
Type of projection multiplexer board: MUX Absent
LEC Rack in Electronic Architecture: Absent
Projection GPA Configuration Version: Version 2
Number of Lens NEXZ Manipulators: 0
Number of Lens Z Manipulators Using Camdisk: 2
Spotsensor surface coating: Metacolor
Energy Sensor: CrismaTec
Spot Sensor Chuck 1: CrismaTec
Spot Sensor Chuck 2: CrismaTec
Modelling for MAXYS: Absent
Uniformity Improvement Package: Absent
Number of pre-amps available per Z-manipulator: 1
Immersion: Absent
Pupil measurements with ILIAS: Absent
Automatic CUA: Absent
Beam Control: None
Extended Spot Sensor Matching: Absent
Number of Rxm: 0
Number of Rym: 0
Diaphragm Limiter: Absent
NA1 motor type: None

Spot Sensor Reticle Stage: Absent
Smooth Field Uniformity: Absent
Exchangeable Last Lens Element: Absent
Exchangeable Pupil Lens Element: Absent
Number of manipulable ELLE axes: 0
UV Shutter version: UV Shutter version 3
Dosecontrol Hardware: ISB
Illuminator platform: Aerial 1
Polarization: Absent
Automatic PCE exchanger: Absent
Automatic CUA exchanger architecture: Not applicable
Test table architecture: Aerial 2
Illumination modes: All illumination modes
DUV Lightsource Power Level: Not applicable
Lens Top Tool Connection: Lens Top Tool can be mounted on top of the Lens
Scanning Energy Sensor Calibration: Static Energy Sensor Calibration
Position of Spot Sensor on Chuck 1: Spot Sensor Position on Chuck 1 layout 1
Position of Spot Sensor on Chuck 2: Spot Sensor Position on Chuck 2 layout 1
Z-capture for low relfectivity wafers: Off
TIS plate deformation correction: Disabled
FSM Flexibility package: Disabled
Field width optimised leveling: Disabled
Constrained fit: Disabled
Levelling throughput improvement on measure side: No levelling throughput package
Point-to-Point LS Machine Matching: Disabled
Circuit Dependent FEC: Absent
Focus Monitoring: Present
Extended LS areas: Disabled
Air Gauge: Absent
Type of Air Gauge: No Air Gauge device present
Reticle shape correction: Disabled
LS focus node: LS focus node 1
Level Sensor Processing Rack: MPCR
LS_PEMM_CONFIG: Present
LS_CPU_CONFIG: 2 CPU's available
BaseLiner overlay high order intrafield: BaseLiner-Overlay high order intrafield is disabled.

BaseLiner focus high order intrafield: BaseLiner-Focus high order intrafield is disabled.
BaseLiner focus control.: BaseLiner-Focus application is disabled.
BaseLiner overlay control.: BaseLiner-Overlay application is disabled.
Pattern Matcher fullchip: Absent
Pattern Matcher: Absent
Maximum numerical aperature (NA) that can be used in Lot Production: level 0
Log missed translations: Disabled
Allow even orders usage: Absent
Multilingual UI: Absent
Improved Maintenance action scheduling.: Disabled
Recipe Creator: Light
Lot Report Data Category: Enhanced Diagnostics
CDC: Enabled
EFESE: Absent
PED control mode: Absent
Proximity Matching: Absent
mbds control: Present
Enhanced exposures 1: Absent
Data collection not covered by FOCUS and OVERLAY: InformPro Data Collection disabled.
Overlay Data Collection: Overlay Data Collection disabled.
XML Lot Report Content Level: Basic
Enable the Maintenance Assistant: Disable Maintenance Assistant
EDA Interface: Disabled
Equipment Constants via SECS interface: Enabled
LCI WaitWatcher plug-in: Absent
Reorder Lot Service: Present
Shot Data Collection: Present
Focus Data Collection: Absent
Alignment Recipe Override: Alignment Recipe Override Disabled
Alignment Strategy ID Standard or Extended. Protected.: Alignment Strategy ID max length
is 15 characters
Enable to support SMASH XY mark types.: SMASH XY marks are not supported.
Specifies which mark types are supported: ASML marks only
Alignment laser configuration: 2 color laser
OADB Improved Dynamic Range: Disabled

board configuration: ODB + ADB
Alignment Camera Mirror: Absent
Athena Narrow Marks Twinscan: Present
Alignment Sensor Type: Athena Narrow Marks OM
Athena Focus Improvements 1: Absent
Max alignment speed: Setting 2
AA processing rack: MPCR processing rack
Particle Extraction Mass Flow Meter: Absent
purging configuration: purging CONFIG 1
Bubble Extraction Seal Setting: Not Applicable
Ultra Pure Water flow controller (WICC): absent
LCW Circuit set-up: Flow Version 1
In situ Wafer Table: Stone Cleaning
Clean Air Configuration: Others
Metroframe Circuit Water Cabinet: Absent
CT Miscellaneous Rack: Present
Clean Air Temperature Control: Driver and ACC
Purge Hoods configuration: Absent
Nitrogen Purge Utility Control: Absent
Reticle Cleaning: Absent
Metroframe type: TYPE_A
Inlet restriction for clean air: Absent
Reticle Stage purged mini environment: Absent
Gas Control Unit Type: High Flow (HF)
Wet Imaging Control Cabinet: Not Applicable
Readout location of Pneumatic Facility Unit sensors: CT sensor board (CTS)
Laminar Bottom Hood: Absent
Extreme Clean Humiditied Air: Absent
Lens Circuit Water Flow: Normal
Motor Circuit Water Flow: Normal
SPM temp correction for lens axis: Disabled
2 Sided IFM-beams for WS-X (expose): Not available
2 Sided IFM-beams for WS-X (measure): Not available
Diff pressure correction for IFM beams: Absent
IFM Laser Configuration: AOM Recombo Laser
Position Control Rack Configuration: Rack Configuration type 3
Position Control Power Rack Configuration: TYPE_4
Number of Motion Controllers: 5 Motion Controllers present

Position Control Motion Control rack: MPCR
Reticle Stage Short Stroke X amp.: PADC 100V/18A
Reticle Stage Short Stroke Y11 amp.: PADC 100V/18A
Reticle Stage Short Stroke Y12 amp.: PADC 100V/18A
Reticle Stage Short Stroke Y21 amp.: PADC 100V/18A
Reticle Stage Short Stroke Y22 amp.: PADC 100V/18A
Wafer Stage Short Stroke 1 XY1 amp.: PADC 100V/18A
Wafer Stage Short Stroke 1 XY2 amp.: PADC 100V/18A
Wafer Stage Short Stroke 1 XY3 amp.: PADC 100V/18A
Wafer Stage Short Stroke 2 XY1 amp.: PADC 100V/18A
Wafer Stage Short Stroke 2 XY2 amp.: PADC 100V/18A
Wafer Stage Short Stroke 2 XY3 amp.: PADC 100V/18A
Reticle Stage Short Stroke Z1 amp.: PADC 100V/18A
Reticle Stage Short Stroke Z2 amp.: PADC 100V/18A
Reticle Stage Short Stroke Z3 amp.: PADC 100V/18A
Wafer Stage Short Stroke 1 Z1 amp.: PADC 100V/18A
Wafer Stage Short Stroke 1 Z2 amp.: PADC 100V/18A
Wafer Stage Short Stroke 1 Z3 amp.: PADC 100V/18A
Wafer Stage Short Stroke 2 Z1 amp.: PADC 100V/18A
Wafer Stage Short Stroke 2 Z2 amp.: PADC 100V/18A
Wafer Stage Short Stroke 2 Z3 amp.: PADC 100V/18A
Reticle Stage Long Stroke Y11 amp.: 450V20A
Reticle Stage Long Stroke Y12 amp.: 450V20A
Reticle Stage Long Stroke Y21 amp.: 450V20A
Reticle Stage Long Stroke Y22 amp.: 450V20A
Reticle Balance Mass 1 amp.: 450V20A
Reticle Balance Mass 2 amp.: 450V20A
Wafer Stage Long Stroke E X amp.: 450V20A
Wafer Stage Long Stroke M X amp.: 450V20A
Wafer Stage Long Stroke E Y1 amp.: 450V20A
Wafer Stage Long Stroke E Y2 amp.: 450V20A
Wafer Stage Long Stroke E CS amp.: 450V20A
Wafer Stage Long Stroke M Y1 amp.: 450V20A
Wafer Stage Long Stroke M Y2 amp.: 450V20A
Wafer Stage Long Stroke M CS amp.: 450V20A
Wafer Stage Balance Mass 11 amp.: Don't care
Wafer Stage Balance Mass 12 amp.: Don't care
Wafer Stage Balance Mass 21 amp.: Don't care

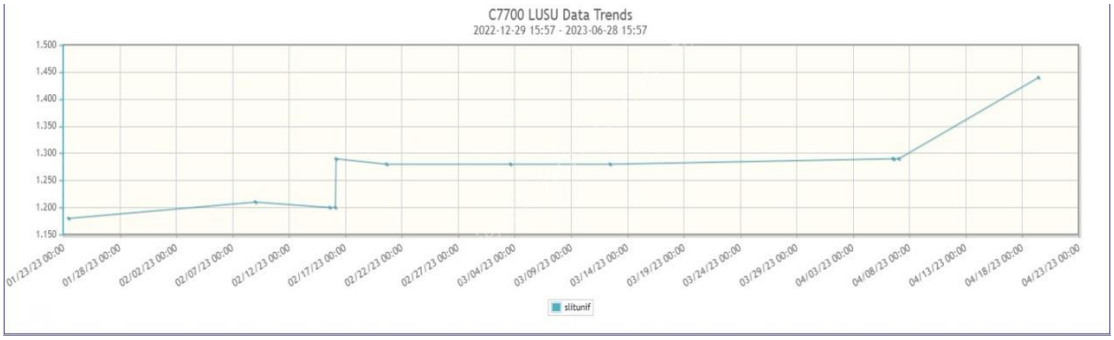
Wafer Stage Balance Mass 22 amp.:
Pressure update rate for fringelength correction: Pressure update rate 2 or 4 Hz
TestStream: TestStream disabled
Performance Enhancement Package: 1
PEP Image Streaming: Absent
Lot Overhead Reduction: LOR2
PDOC quality indicator check: PDOC quality indicator functionality is absent
Combined stage alignment: Disabled
Reduced capture range for TIS scans: Disable reduced range TIS scan scenarios
Extended Zone Alignment: Disabled
Intrafield Higher Order Process Corrections: Disabled
SMASH Reuse Capture Information in Stage Alignment: Coarse capture scans are done on
all stage alignment marks.
Allow wafer plane deviation check with Focus Monitoring: Disabled
Parameter indicates how long overlay data will be stored.: Short retention period.
Level sensor Ry drift correction: Disabled
Fading Control Switch: Disabled
Improved wafer reject mode: Disabled
Automated Lens Heating Calibration: Disabled
Lens heating History in LH Feedforward: Disabled
Allow different Exp,TIS Align set: Absent
Imaging Fading Control: Disabled
Gridmapper: Disabled
2D grid correction: Disabled
Double TIS scan: Disabled
Symmetrical Reticle Alignment: Disabled
Ast offset correction in TIS LHFB/LOCO (Version 3): Enabled
Choice of avoidance routing.: Absent
NEXZ-tilt per exposure: The NEXZ-tilt cannot be adjusted per exposure.
Off-axis slit: Projection lens has no off-axis slit.
Improved Edge Field Leveling: Disabled
Enhanced Throughput Reticle Alignment: Present
Wavelength Adjustable: Fixed
Allow L1L7 Type 1 Optimization: Absent
Lot Alignment Report Encryption: Unencrypted
Stage Alignment Filter: Absent
Lot Correction Sequence: Type B

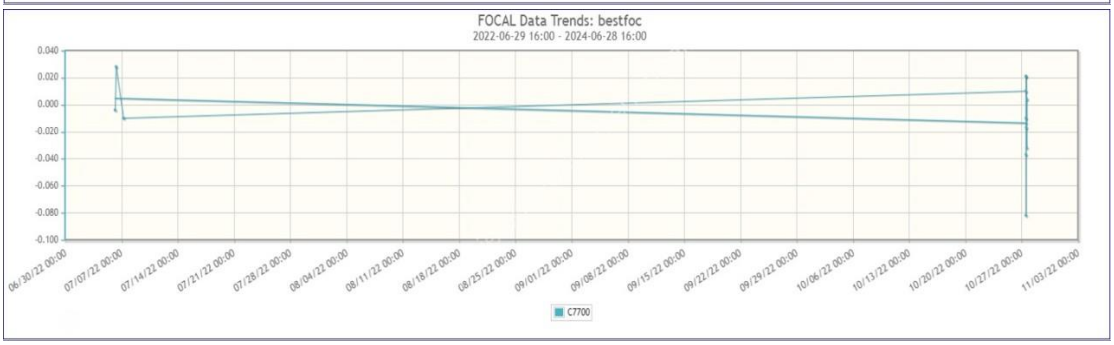
Lens Heating Feedback: Absent
Application Specific Lens Heating Calibration and Verification: Present
Improved Contrast Control: Absent
ILIAS lens setup: Absent
Air Gauge Improved Levelling: Absent
Process Dependent Gain Correction: Absent
Enhanced Exposure Overlay: Absent
ALE 1 Use: Lens heating only
Overlay Node: Level 5
E-chuck Flatness Qualification Test: Disabled
TOP HD: Absent
Reticle Align High Precision: Absent
LS spot coverage: Absent
Layout Version Number TIS Plate 1 on Chuck 1: TIS Plate 1 Layout Version 4
Layout Version Number TIS Plate 1 on Chuck 2: TIS Plate 1 Layout Version 4
Layout Version Number TIS Plate 2 on Chuck 1: TIS Plate 2 Layout Version 4
Layout Version Number TIS Plate 2 on Chuck 2: TIS Plate 2 Layout Version 4
Usage of wavelength data by TIS: Disabled
Usage of Energy Sensor data by TIS: Disabled
Indication what kind of AM controller hardware is present: SUCR
Piezo Active Lens Mounts: Absent
ILIAS Functionality For Lithoguide: Absent
ISIS Functionality For Lithoguide: Absent
SAMOS Stray Light Test For Lithoguide: Absent
PUPIL Measurement For Lithoguide: Absent
FOCAL Measurement for Lithoguide: Absent
Leveling Verification Test for Lithoguide: Absent
Lithoguide Imaging Recipes: Absent
Dose System Performance Test for Lithoguide: Absent
ILIAS Sensor Location: Absent
ILIAS sensor type chuck 2: Zernike only
ILIAS sensor type chuck 1: None
Reticle Level Polarization Sensor: Absent
Improve robustness DPCM mark: Disable DPCM mark robustness improvement
SASO robustness and fiber connectivity: Disable SASO robustness
Extended X width masking range: Disabled
PDO offset for EFL LS spots: Disabled.
Assure System Snapshots: Assure System Snapshots not allowed

Insert a delay time before starting a Lot (lens heating).: Disabled
Save throughput data to the disk: Disabled
Patch strategy: Patchlevel
Chuck Dedication: Basic
Application Type: Scanner Application
Number of RMCS clients: No clients
MDL Viewer: Site View
ZERO Fiducial: ILIAS
Machine Architecture: XT Machine Architecture
XT Architecture Revision: Rev2
Machine Type: 400
Machine Specification: F Specification
Stand-alone Workstation: FALSE
Machine Location: Customer Site
CP 1A: Present
CP 1B: Absent
CP 2: Present
CP 3: Present
CP 4: Present
CP 5: Absent
CP 6: Absent
Wafer Handler Productivity: Wafer Handler Productivity Level 1

Damage/Missing parts list

Please inspect tool to reconfirm


C7700 LUSU Data Trends
2022-12-29 15:57 - 2023-06-28 15:57
1.500
1.450
1.400
1.350
1.300
1.250
1.200
1.150
01/23/23 00:00
01/28/23 00:00
02/02/23 00:00
02/07/23 00:00
02/12/23 00:00
02/17/23 00:00
02/22/23 00:00
02/27/23 00:00
03/04/23 00:00
03/09/23 00:00
03/14/23 00:00
03/19/23 00:00
03/24/23 00:00
03/29/23 00:00
04/03/23 00:00
04/08/23 00:00
04/13/23 00:00
04/18/23 00:00
04/23/23 00:00
slitunif


FOCAL Data Trends: bestfoc
2022-06-29 16:00 - 2024-06-28 16:00
0.040
0.020
0.000
-0.020
-0.040
-0.060
-0.080
-0.100
06/30/21 00:00
07/07/21 00:00
07/14/21 00:00
07/21/21 00:00
07/28/21 00:00
08/04/21 00:00
08/11/21 00:00
08/18/21 00:00
08/25/21 00:00
09/01/21 00:00
09/08/21 00:00
09/15/21 00:00
09/22/21 00:00
09/29/21 00:00
10/06/22 00:00
10/13/22 00:00
10/20/22 00:00
10/27/22 00:00
11/03/22 00:00
C7700