



Preserving the Past,
Insuring the Future



Waferfiche™ Specifications

Image Specifications:

- Type of input formats: Tiff/JPEG/PNG/PDF/MS Word
- Scan resolution: Any (recommend 300 dpi or higher)
- Max. size of scanned document: 28ft X 28ft (@150 dpi)
- Archival resolution: up to 12700 dpi
- Pixel size: 2µm
- Reduction ratio: 85x
- Total archival area on Waferfiche™: 13273.22 mm²
- Approximate number of images that can be archived on the Waferfiche™ at 120 DPI as well as 150 DPI archival resolution is as follows:

Page size (mm)	A6 (148 x 105)	A5 (148 x 210)	A4 (297 x 210)	A3 (297 x 420)	A2 (594 x 420)	A1 (594 x 841)	A0 (1189 x 841)
No of images @120 DPI	8000	4000	2005	1092	510	257	125
No of images @150 DPI	4800	2400	1231	572	260	130	75

Mechanical Specifications:

- **Pass ASTM D5276** Industry Standard for Free Fall Drop Height of 35"
- **Pass MIL SPEC-C 484** Industry Standard for Adhesion Resistance
- **Pass MIL SPEC-C 48497** Industry Standard for Severe Abrasion Resistance (Cover)
- **Pass MIL SPEC-C 48497** Industry Standard for Severe Abrasion Resistance (Base)
- **Pass MIL SPEC-C 48497** Industry Standard for Moderate Abrasion Resistance (Lens)
- **Pass MIL SPEC-C 48497** Industry Standard for Film Adhesion
- **Pass ASTM G60-01** Standard Practice for Conducting Cyclic Humidity Exposures
- **Pass ASTM G50-76** Standard Practice for Conducting Atmospheric Corrosion Tests on Metals
- **Pass MIL-M-13508C, MIL-C-675A, MIL-C-675C, MIL-C-48497A** various standards for degradation of optical materials under conditions of high humidity (95%) and temperature (49°C), 24 hour exposures
- **Pass MIL-STD-810** Extended period humidity corrosion testing, 10 days
- **Pass MIL-C-48497A** Temperature limits and cycling



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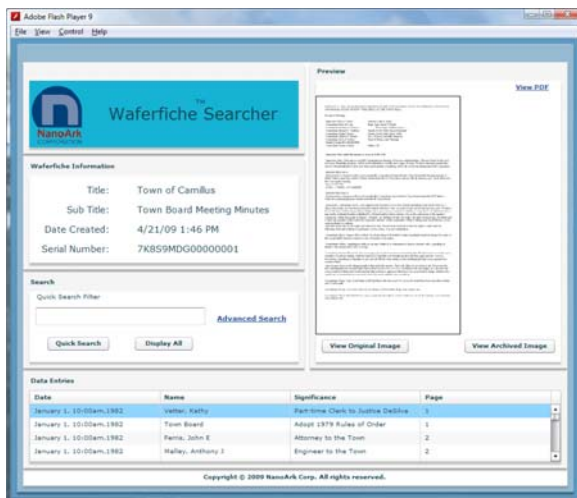
- **Pass ASTM D999** Vibration test of shipping container test protocol
- **Pass ASTM D4728** Random vibration testing of shipping container test protocol
- **Pass ISO 18901** Imaging Materials - Processed Silver Gelatin Black-and-White Films - Specifications for Stability section 8.10 Image Stability Test.

Embedded Flash Specifications:

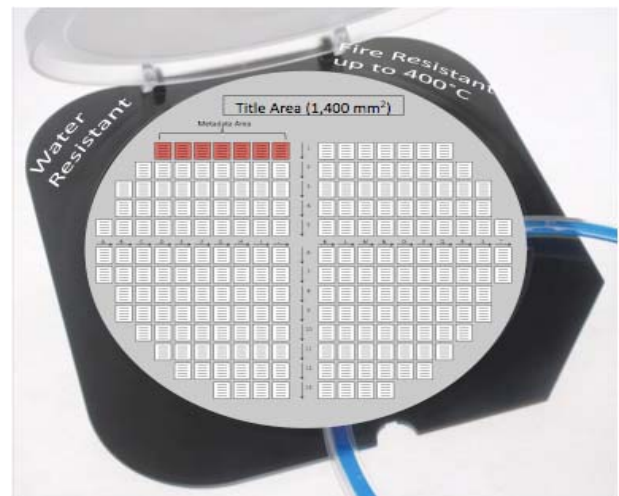
- Standard USB Interface
- Read-only prevents accidental deletion / overwrite
- 10-year flash memory data retention guarantee
- Ability to upgrade to latest memory interface every 7-8 years
- Compatible with Macs and PCs
- PCs - Win Vista/ XP / 2000 / ME / 98 / 95
- Software specifications:
 - Embedded software in flash runs using Adobe Flash
 - Image formats stored – TIFF, PDF & PNG
 - Metadata format – XML

Metadata Specification:

- ANSI/NISO Z39.32 standard provides a set of minimal specifications for eye-legible information to be included in the header area of microfiche



Screenshot of the flash memory application



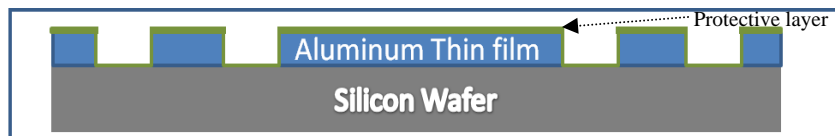
Schematic illustrating the layout of images on Waferfiche™



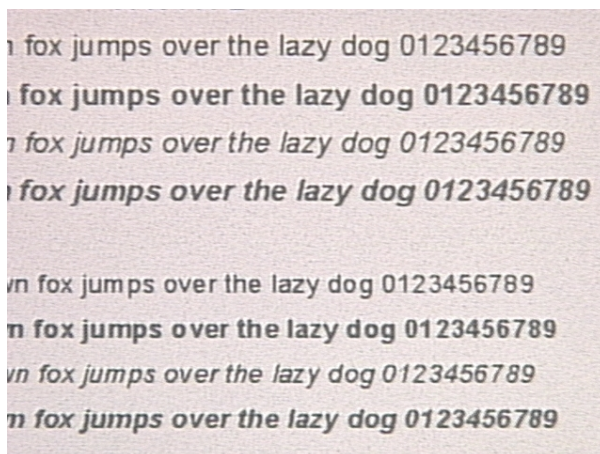
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Silicon Wafer Specifications:

- Diameter: 150mm
- Thickness: 650.00 - 697.00 μm
- Resistance: 0 – 100 $\Omega \times \text{cm}$



Cross-sectional view illustrating the various layers of the Waferfiche™



Sample image optically retrieved from the Waferfiche™

Storage Conditions:

- Temperature: 0° – 60° C
- Humidity: 0 – 90%

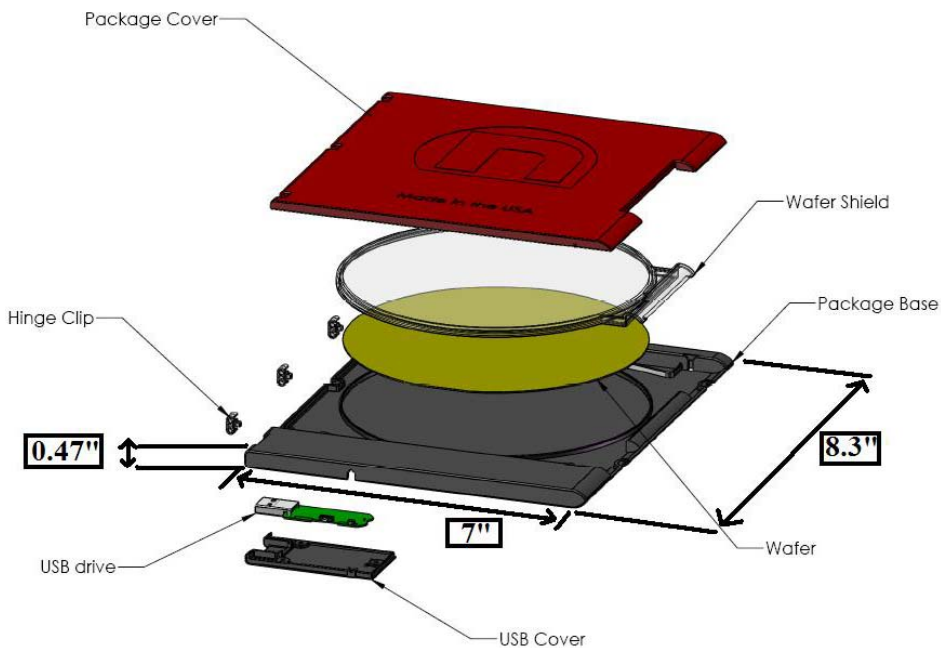
Package specifications:

- Height: 8.3"
- Width: 7"
- Thickness: 0.46"
- Specific Heat 0.3 BTU/1lb-°F tested using Industry Standard ASTM C351
Water Absorption, equilibrium temperature at 73°F is 0.35% tested using Industry Standard ISO 62



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Waferfiche™ Package:



Waferfiche™ Package Out-gassing Data:

