SIPR-9740

- Application
  - Trench Processing
  - Coil Processing
- Advantages
  - Super High Resolution (0.38µm space at 6µ Thickness)
  - Vertical Profile
  - Heat Resistance
  - Scum Free
- Standard Process
  - Spin Coating of SIPR-9740
    - (6µm^{t} at 3000rpm)
  - Prebake of Photoresist layer
    - (100°C x 120 sec on Hot-Plate)
  - Exposure
    - (By I-line or G-line stepper)
  - LAE (Leave After Exposure)
    - (0~20min according to the film thickness)
  - PEB (Post Exposure Backing)
    - (110°C x 90 sec on Hot-Plate)
  - Develop
    - (SSFD-238(TMAH=2.38%))
    - (50sec x 3 times (at 5µm^{t}))

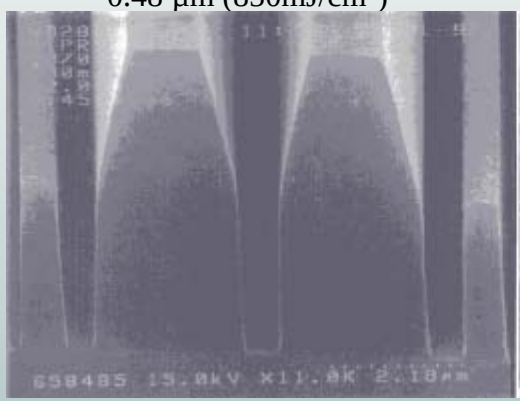
SIPR-9740
on Si sub. (6μ^t)

Prebake: 100°C x 120 sec
Exposure: Varied (NSR-1755i7A)
Focus= +1.0μm

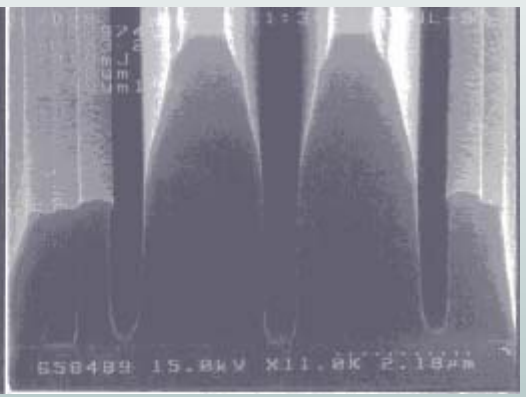
LAE: 15 min.
PEB: 110°C x 90 sec
Develop: 50sec x 4 times (SSFD-238)

Resolution (iso-Space)

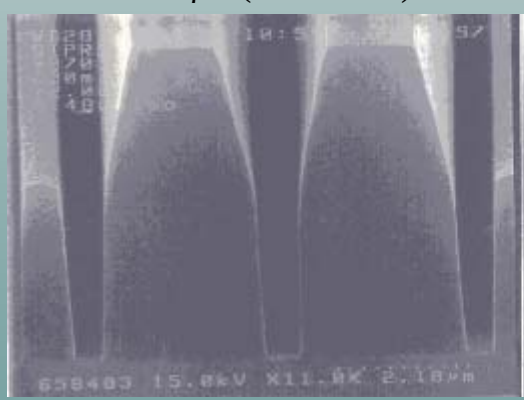
0.48 μm (850mJ/cm^2)



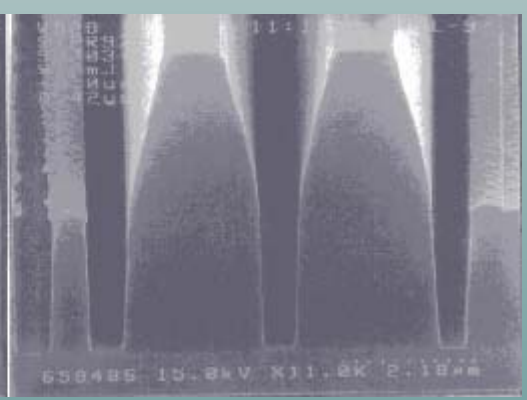
0.42μm (930mJ/cm2)



0.45μm (930mJ/cm2)



0.38μm (930mJ/cm2)



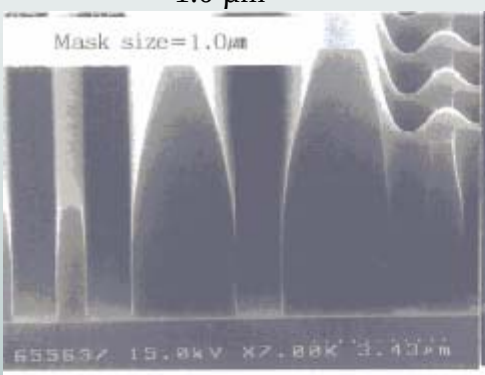
SIPR-9740
on Ni/Fe sub. (8μ^t)

Prebake: 100°C x 120 sec
Exposure: 1000mJ/cm^2 (NSR-1755i7A)
Focus= +3.0μm

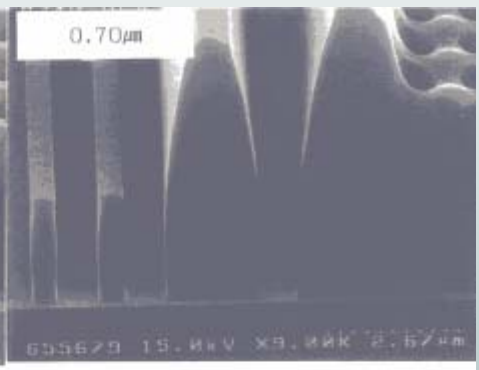
LAE: 20 min.
PEB: 110°C x 90 sec
Develop: 50sec x 5 times (SSFD-238)

Resolution (iso-Space)

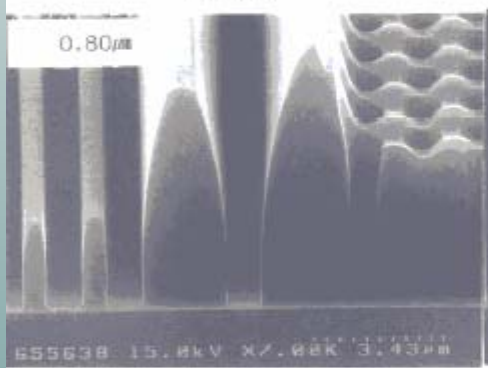
1.0 μm



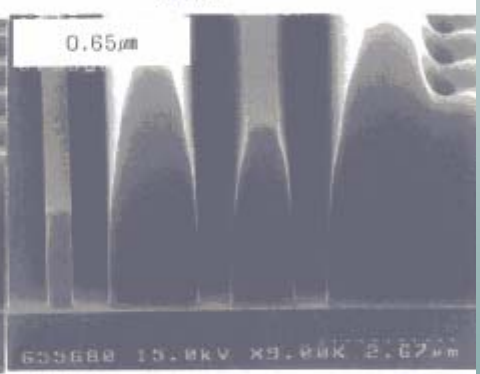
0.70μm



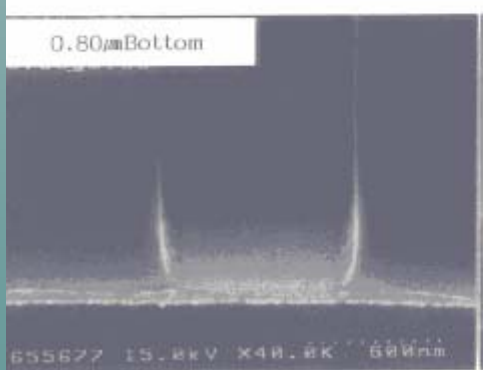
0.80 μ m



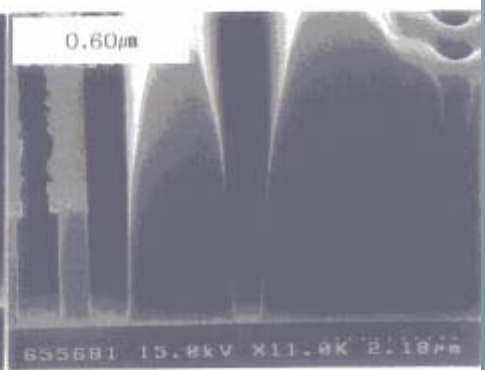
0.65 μ m



0.80 μ m L/S(× 40,000)



0.60 μ m



SIPR-9740
on Ni/Fe sub. (8μ^t)

Prebake: 100°C x 30 min (Clean oven)
Exposure: 1000mJ/cm^2 (NSR-1755i7A)
Focus= +3.0μm

LAE: 20 min.
PEB: 110°C x 90 sec
Develop: 50sec x 5 times (SSFD-238)

Resolution (iso-Space)

0.80 μm

0.65μm