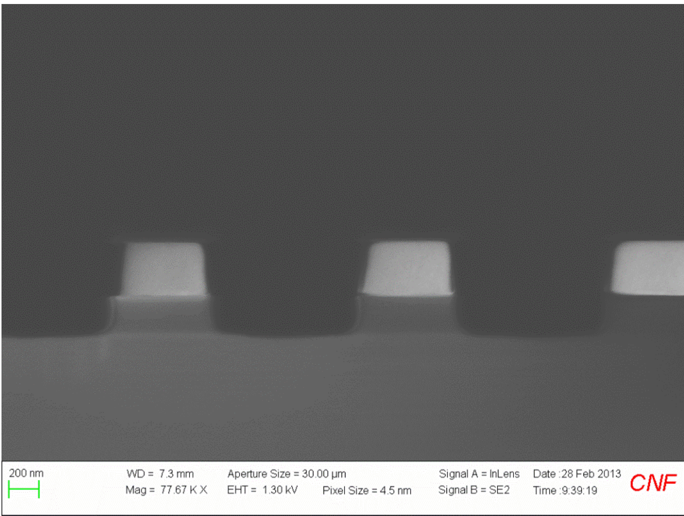
2013.03.04

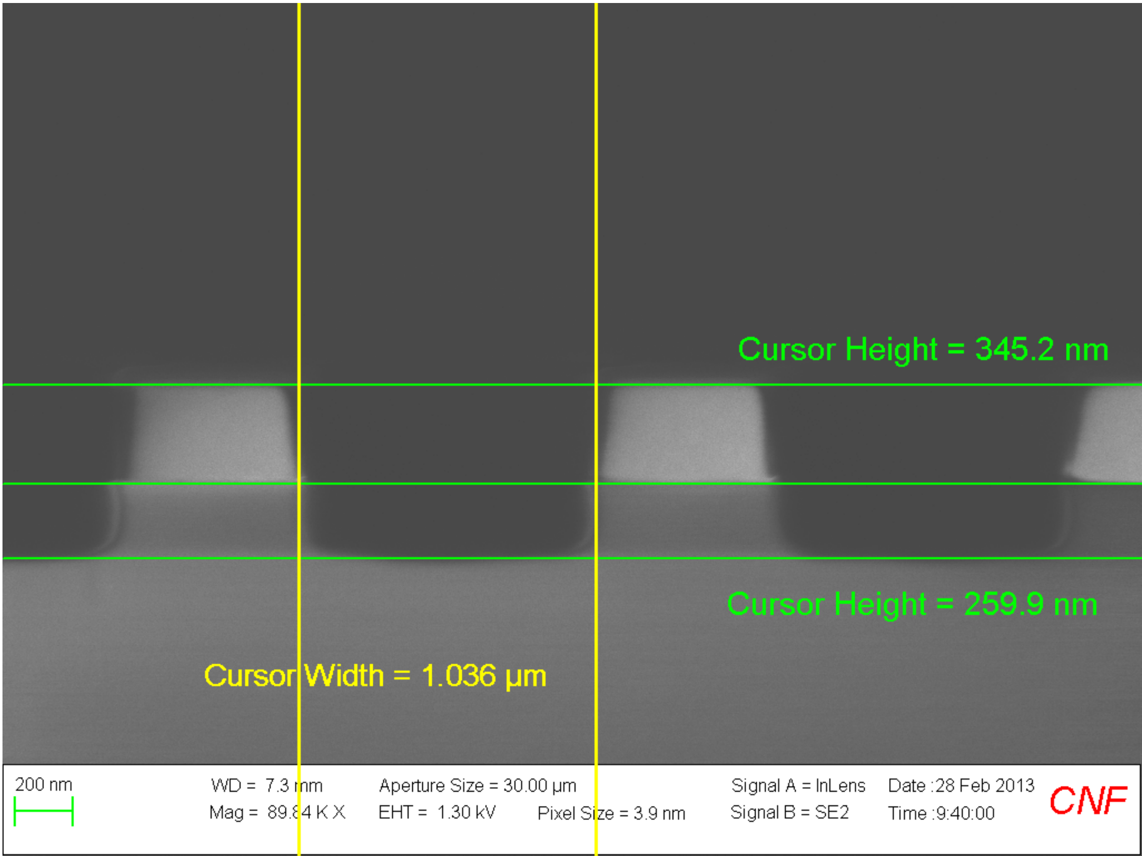
NEW ETCH RATE AND SELECTIVITY VALUES FOR **OXFORD 82**

Tool	Chemistry	Material	Etch Rate (nm/min)	Selectivity	Notes
Ox 82	CHF_3O_2	LSN	54.6	1.84	3 min O_2 plasma, 10 min season
Ox 82	CF_4	LSN	74.5	0.4	"
Ox 82	CF_4	Si	71	1.09	"
Ox 82	SF_6/O_2	Si	1985	8.2	"
Ox 82	CHF_3/O_2	Si_3N_4	54	1.45	"
Ox 82	CF_4	Si_3N_4	74.5	0.99	"
Ox 82	CHF_3/O_2	SiO_2	40.7	1.14	"
Ox 82	CF_4	SiO_2	33.9	0.4	"
Ox 82	CHF_3/Ar	SiO_2	17.8	8.5	10 min O_2 plasma, 3 min season

LSN – CHF_3/O_2 Etch

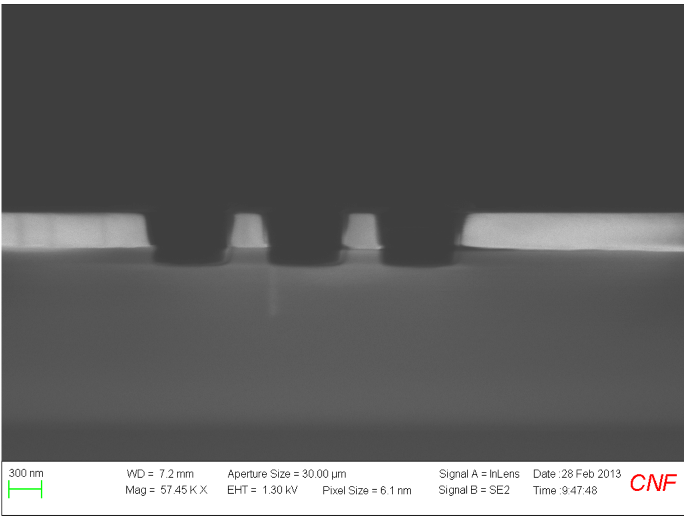
Etch Rate: 54.6 nm/min
Selectivity: 1.84

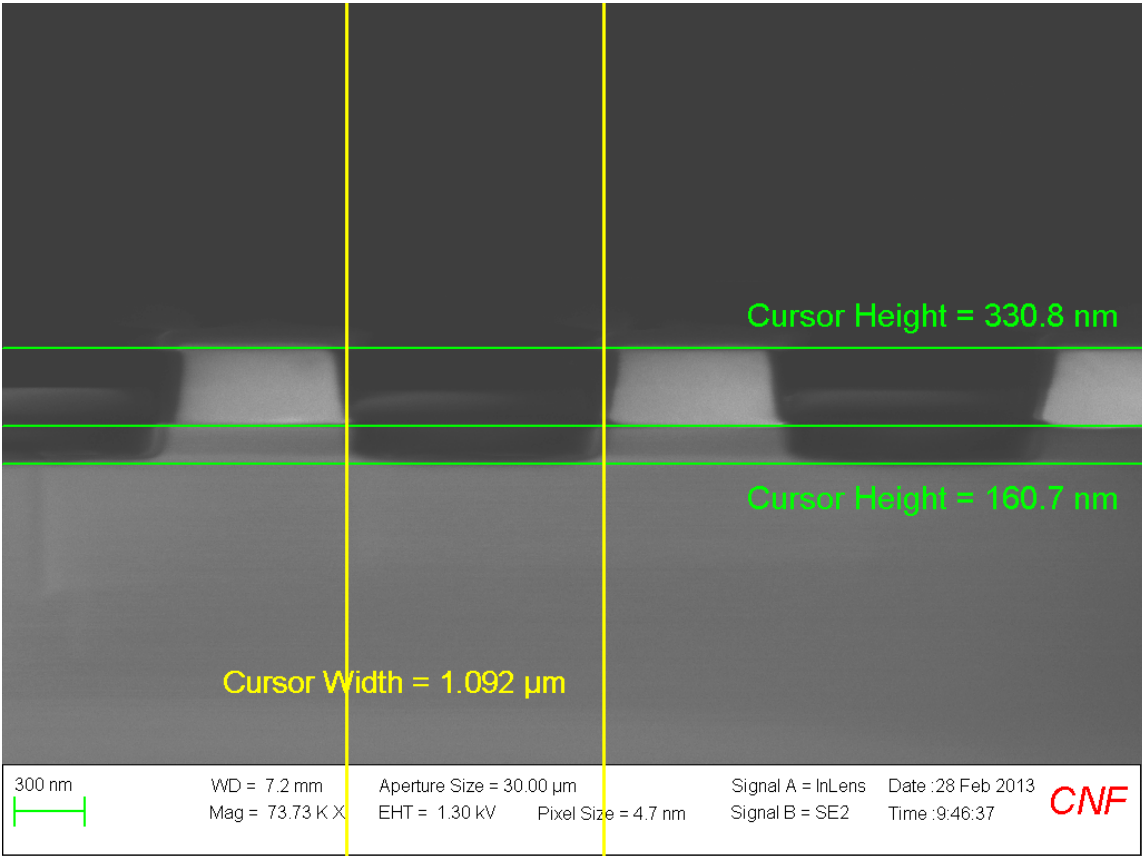




LSN – CF_4 Etch

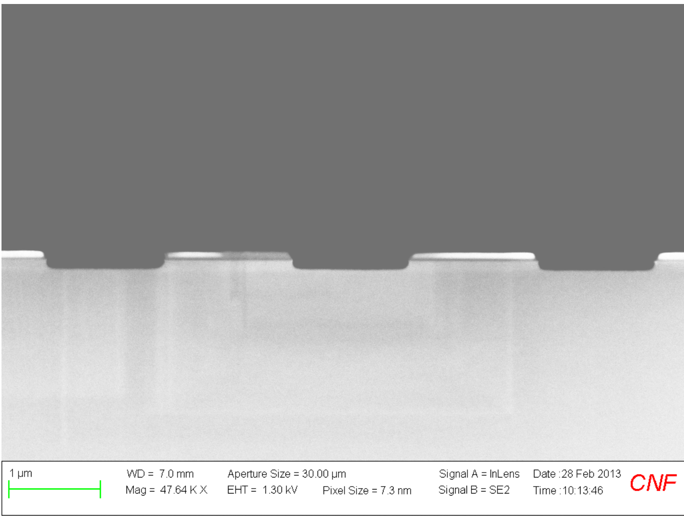
Etch Rate: 74.5 nm/min
Selectivity: 0.4

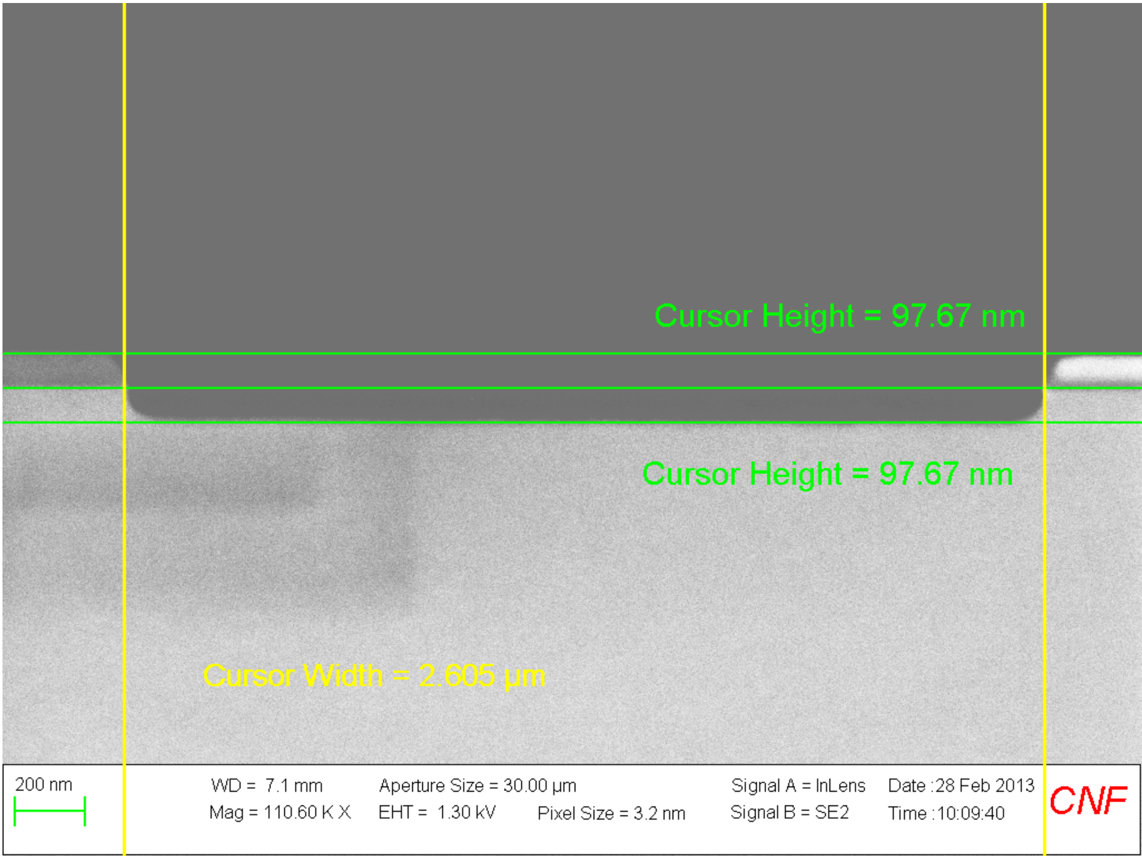




Si – CF_4 Etch

Etch Rate: 71 nm/min
Selectivity: 1.09

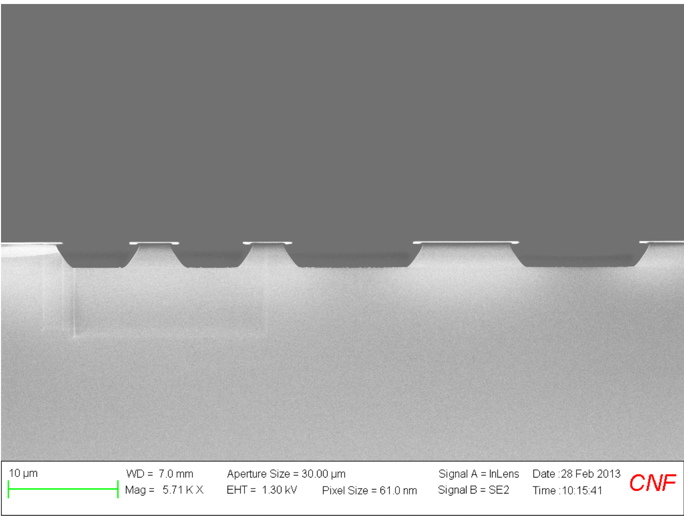


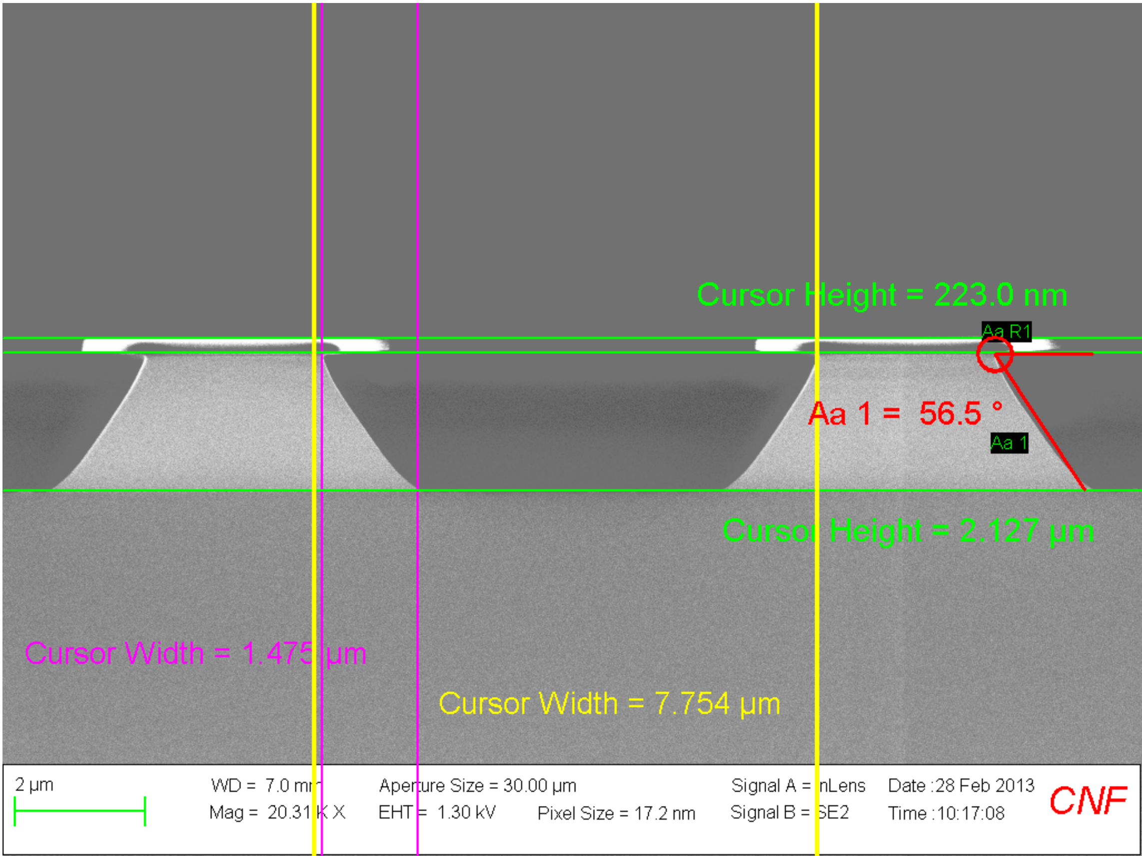


Si – SF_6/O_2 Etch

Etch Rate: 1985 nm/min

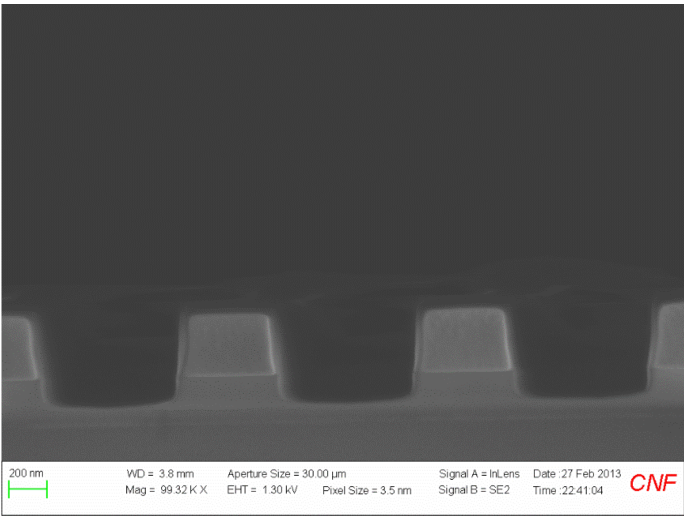
Selectivity: 8.2

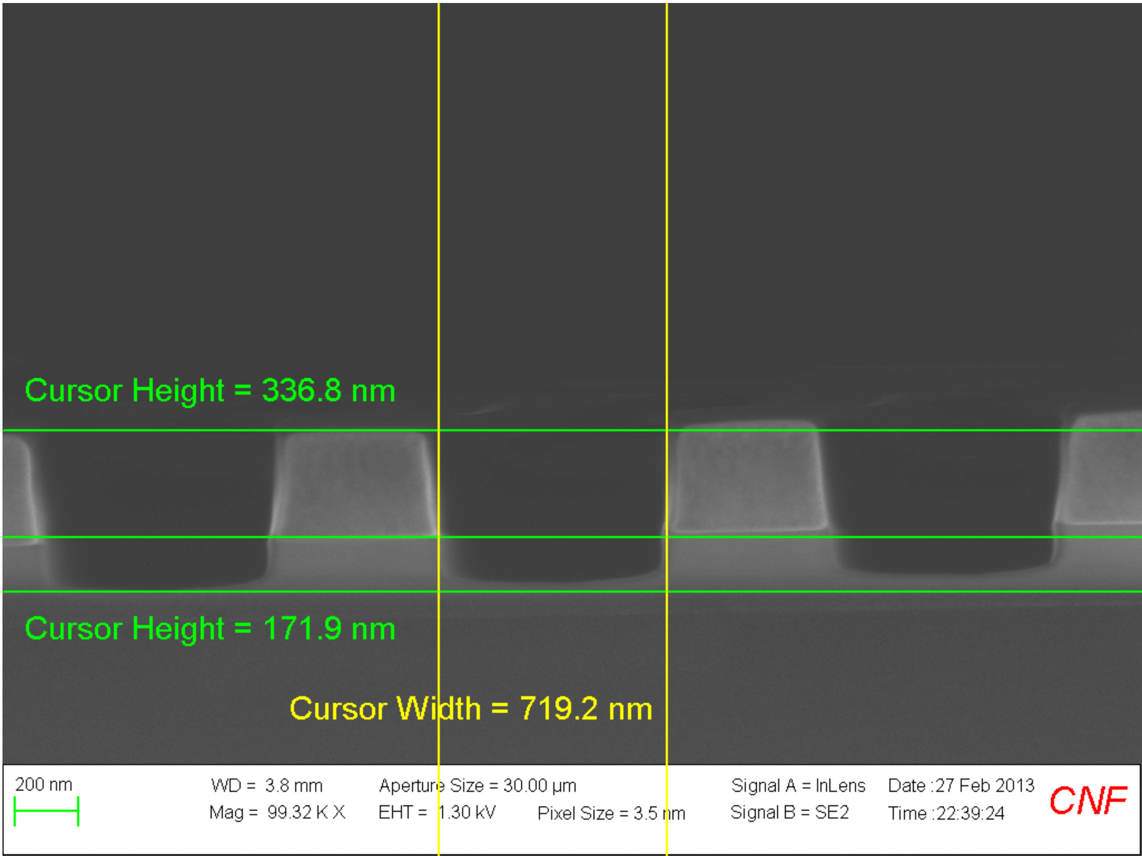




Si_3N_4 – CHF_3/O_2 Etch

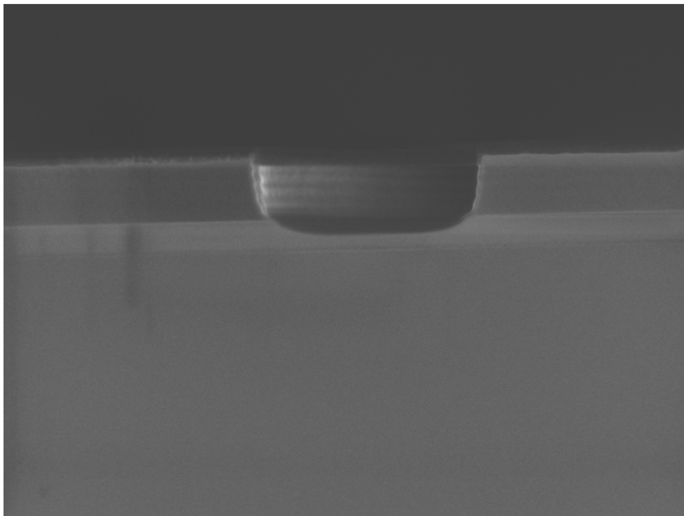
Etch Rate: 54 nm/min
Selectivity: 1.45

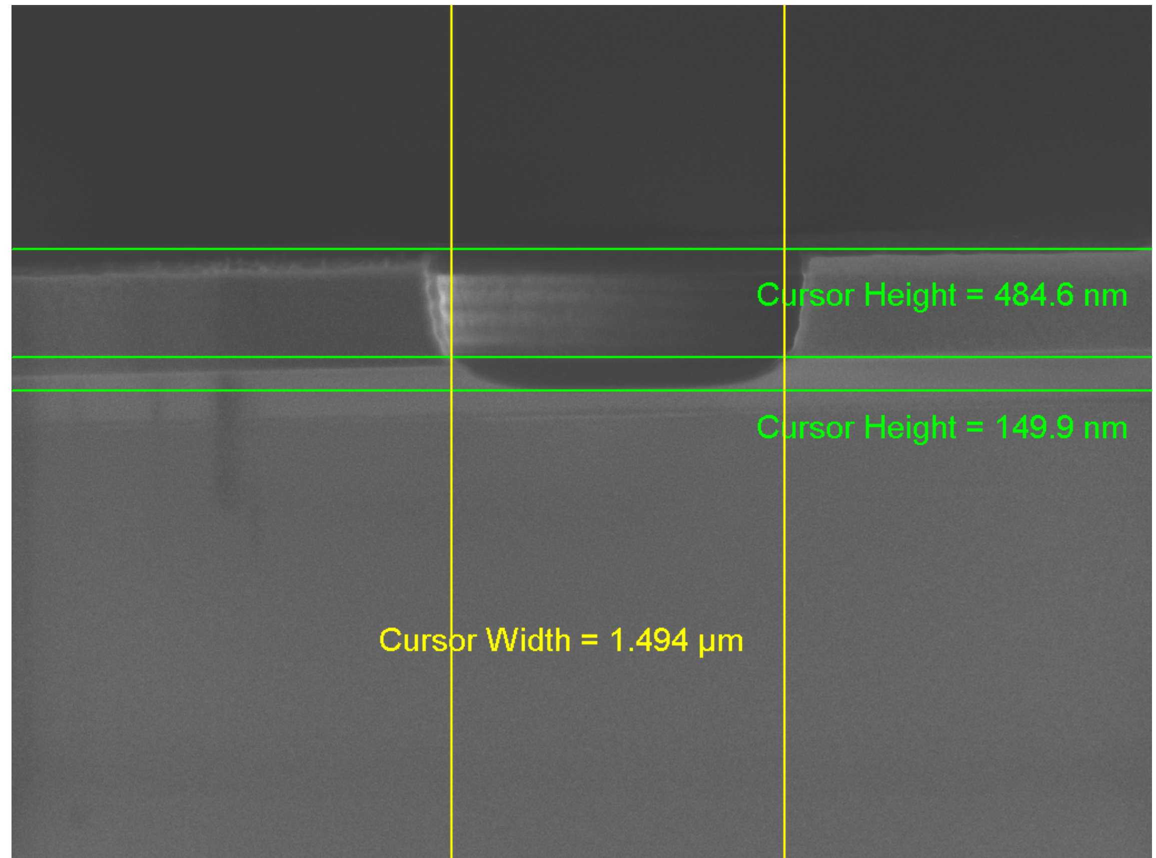




Si_3N_4 – CF_4 Etch

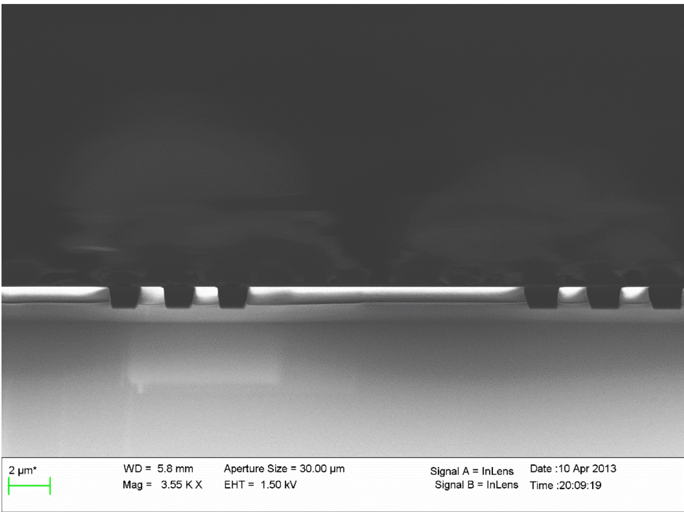
Etch Rate: 74.5 nm/min
Selectivity: 0.99

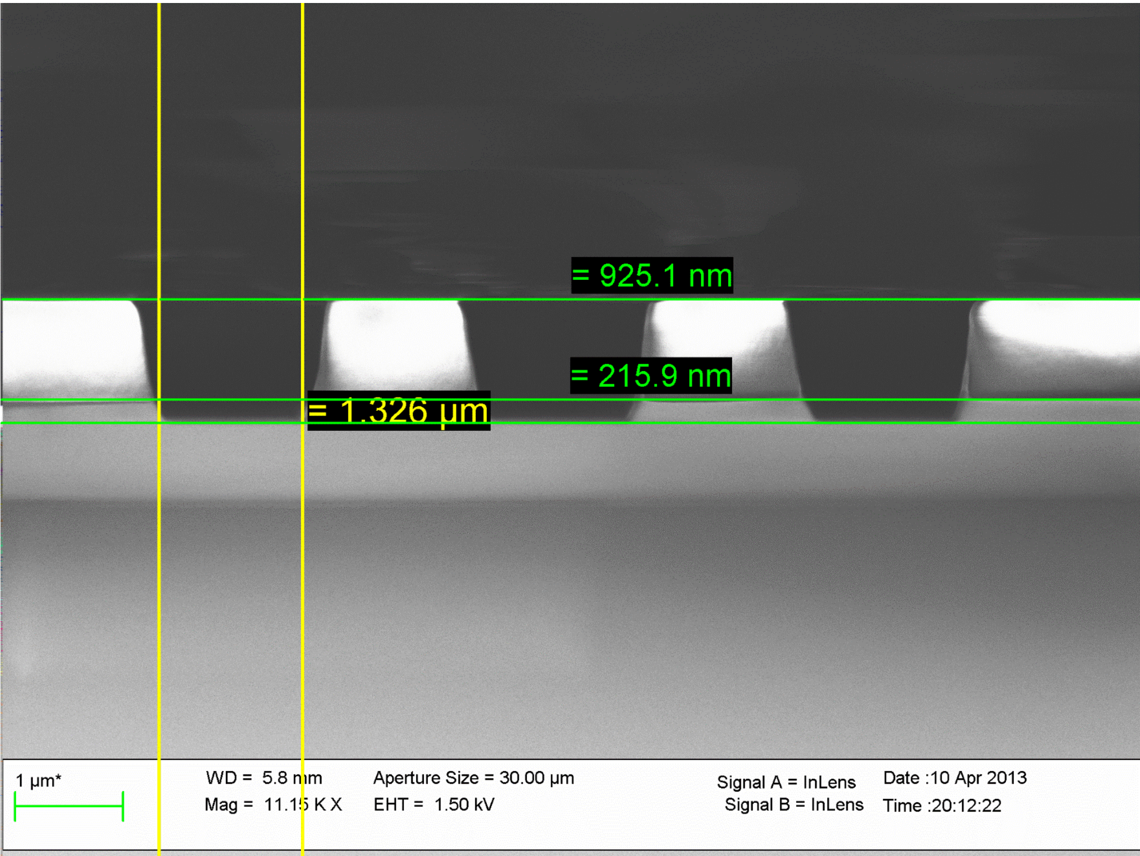




SiO_2 – CHF_3 / O_2 Etch

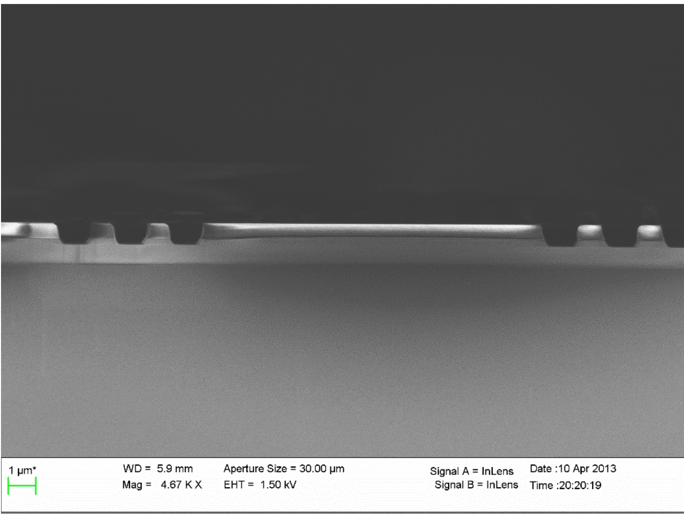
Etch Rate: 40.7 nm/min
Selectivity: 1.14

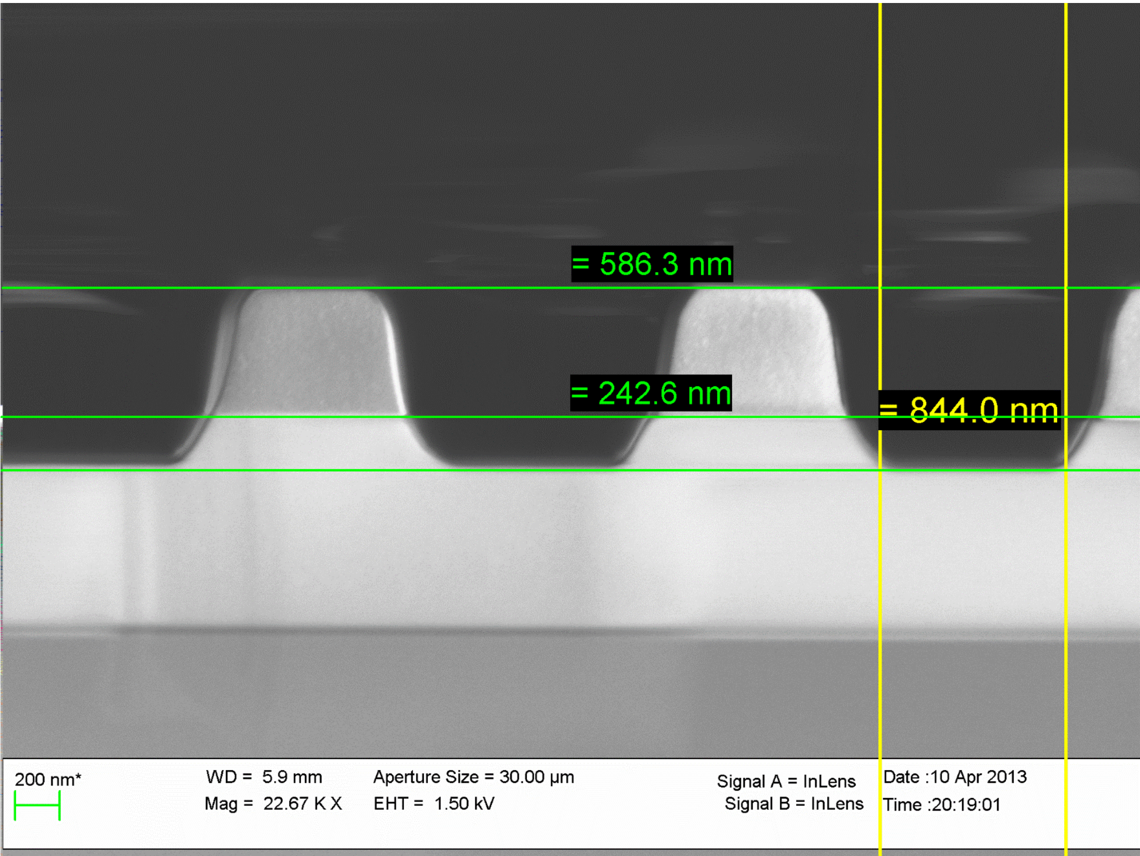




SiO_2 – CF_4 Etch

Etch Rate: 33.9 nm/min
Selectivity: 0.4





SiO_2 – CF_3/Ar Etch

Etch Rate: 17.8 nm/min

Selectivity: 8.5