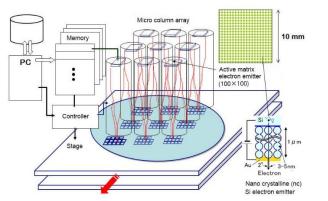
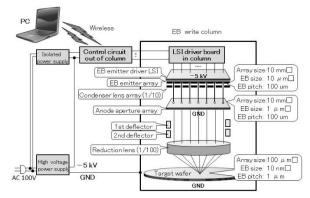
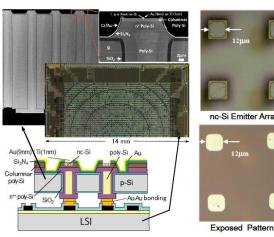
Development of massive parallel EB exposure system



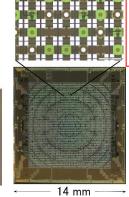


EB exposure system using active matrix electron source array

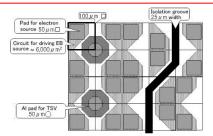
Structure of a single column (prototype is lateral)





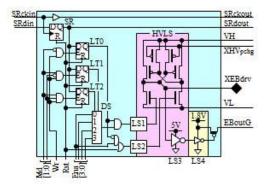


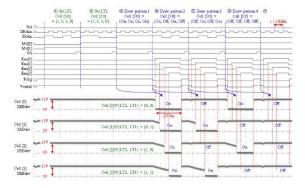
Active matrix electron source chip, the EB exposure system and published book "Development of massive parallel Electron Beam Write System" are displayed in the next room (Historical museum technology).



Nanocrystaline (nc) Si electron source connected to LSI with TSV

Driving LSI (100 × 100 cells)





M.Esashi, A.Kojima, N.Ikegami, H.Miyaguchi and N.Koshida: Development of Massively Parallel Electron Beam Direct Write Lithography Using Active-matrix Nanocrystalline-silicon Electron Emitter Arrays, Microsystems & Nanoengineering (2015) 1, 15029(1-8)







(H.Miyaguchi, M.Esashi, A.Kojima, N.Ikegami, H.Ohi, M.Sugata) (N.Koshida)

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