

LAYER TRANSFER EFII-SiC (LT EFII-SiC)

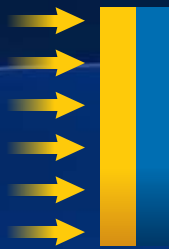
NO MORE EPITAXY

HPSI-SiC wafer as donor



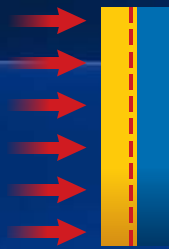
1

EFII implant (doping)



2

Deep Hydrogen implant



3

Layer transfer to acceptor wafer wafer bonding



4

Layer split



5

SIC DEVICE READY ENGINEERED SUBSTRATE

Reclaim wafer for refresh and reuse



Donor SiC

Fully engineered device ready SiC wafer



LT EFII-SiC

Handle substrate acceptor wafer (SiC, Si, Poly SiC)

TECHNOLOGY BENEFITS OF LT-EFII-SiC

„Thick“ Layer Transfer of HPSI-SiC

COST

No Epitaxy

Efficient Use of Donor Wafer

Polycrystalline SiC Acceptor Wafer

Alternative Acceptor Wafer

Function

Optimized Drift-Zone Profiles

Free Choice of Si/C-terminated Surface

Symmetrical Trench

