

Buck Quick Worksheet

Targets: VIN range _____ VOUT _____ IOU _____ Ripple target _____

Switching: FSW _____ kHz Delta IL _____ A (20–40% IOU)

Inductor: L est _____ μ H ISAT _____ A DCR _____ $m\Omega$

MOSFETs/Module: HS Rds_on _____ $m\Omega$ LS Rds_on _____ $m\Omega$ Qg _____ nC Package _____

Compensation (Type II/III): Rcomp _____ Ccomp _____ Cff _____ Target fc _____ kHz

Protections: UVLO _____ V OVP _____ V OCP _____ A Soft-start _____ ms Pre-bias: Yes / No

Validation: load step, line step, startup (pre-bias), short/OCP, thermal sweep, EMI

Notes: _____