

## UCD3138 in HB-LLC 12v/550 W design

Could someone pl help in identifying all documents that help complete UCD3138 based HB-LLC design? And clarify if it is beneficial to use 1 resonant capacitor or 2 with the mid node connected to the transformer.

In my judgment, the latter is beneficial to transformer design- it should be smaller in size due to  $V_{in}/2$  applied at the primary, assuming one can handle  $2x I_{pri}$  without a substantial increase in  $I^2R$  losses. This is our case.

Also: very importantly, C2000 FB-LLC has current sense transformer as 1:25, while HB-LLC shows 1:250?

I think there is some typo here.  $I_{pri}$  is in amp range(<3Amp?) ...

finally, whose white paper is best to use to calculate  $N$ ,  $C_r$ , and  $Q$ ?...there seems to be an abundance of contradictory conclusions or process for obtaining these critical parameters.

Are these circled signals used in HB-LLC

