

# Transfer Functions of Switching Converters: Fast Analytical Techniques at Work with Small-Signal – 1<sup>st</sup> print

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Corrections of typos, mistakes and errors found by readers or by the author himself.

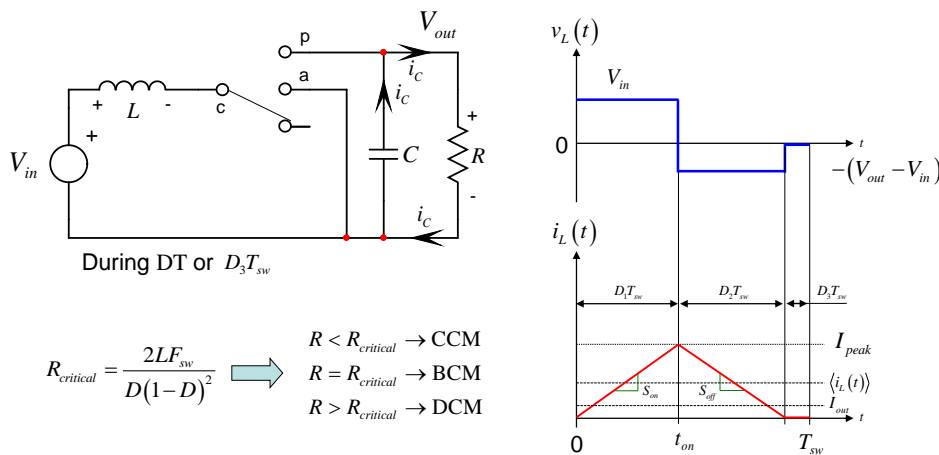
**Page 3:** figure 1.3 caption: you *perturb* a system...

**Page 21:** the off-time slope in the buck is negative of course and (1.48) could be misleading as it considers the downslope to be  $V_{out}/L$  as commonly expressed. If we consider a negative slope as in (1.45), then the (1.48) should be written as

$$I_{valley} = I_{peak} + S_{off} t_{off} = I_{peak} - \frac{V_{out}}{L} t_{off} \quad (1.48)$$

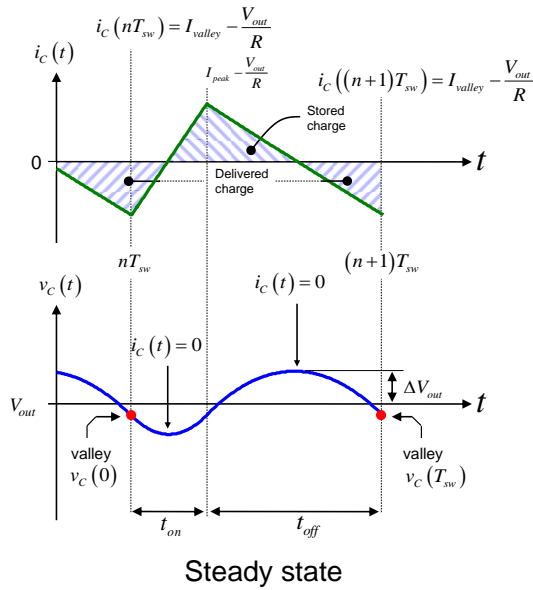
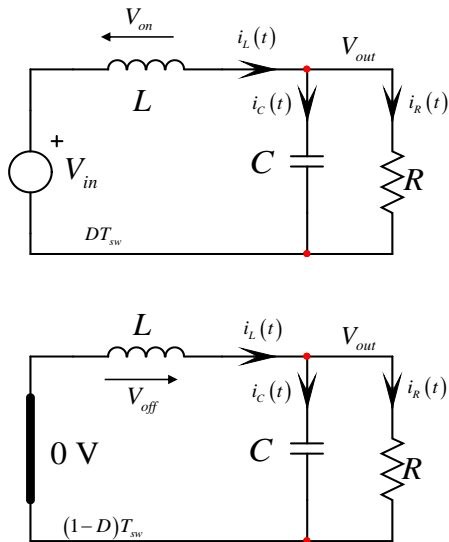
**Page 28:** below the two upper bullets: ...the on-time to *supply*...

**Page 28:** Figure 1.33: the labels  $a$  and  $p$  are swapped.  $p$  goes to the  $RC$  network while  $a$  goes to ground.



**Page 29:** figure 1.34 caption: ...converter *illustrates*...

**Page 40:** figure 1.45, the inductor voltage arrow should point right since the left node is grounded and the voltage across the capacitor is positive:

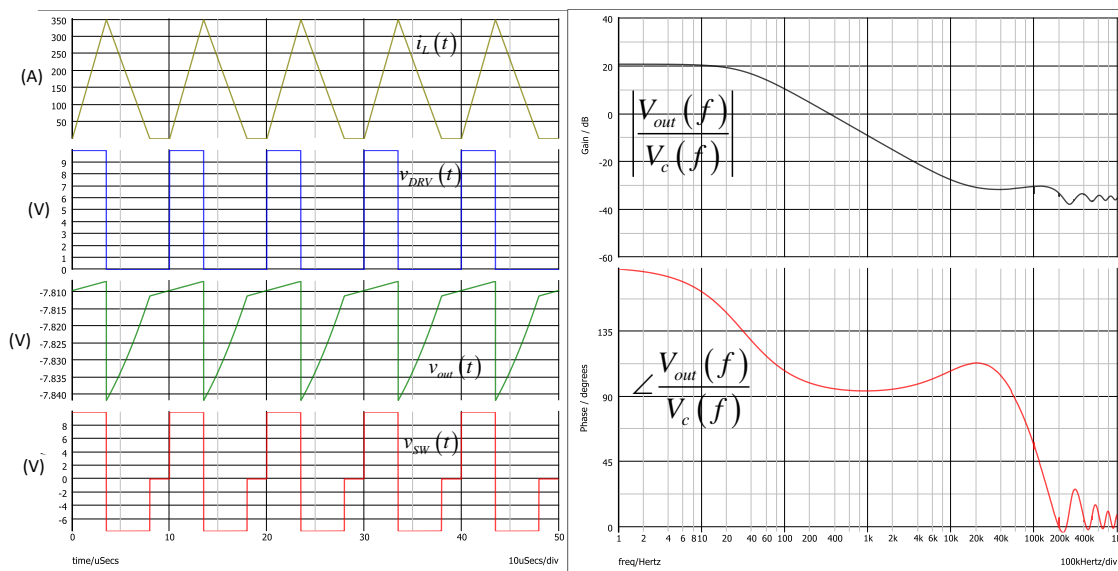


**Page 70:** under (1.168): ...because  $\phi$  a lot...

**Page 85:** under (1.191): ...during  $t_{on}$  is  $V_{in} - V_{out}$ .

**Page 213:** figure 2.114 caption: ...a Mathcad<sup>®</sup> sheet helps...

**Page 548:** figure 4.131 figure. For a reason that I ignore, the magnitude plot has been truncated:



**Page 626:** below equation (5.74) and in the text, then below (5.78): **Error! Reference source not found.** It should be: ...defined in (5.72). ...to the factorization in (5.71). ...raw numerator of (5.62).