Hello Beamer!

LaTeX in Different Environments

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Contents

Demos

Even Revealing Lists and Images

Table 1: Table of specified parameters and achieved values

Parameter	Target	Calculated	Simulated
NF_{dsb}	≤ 4	11.17	5.95
IIP3	≥ -22	≥ -2.73	-4.98
1 dB Compression	≥ -32	≥ -12.73	-14.2
Gain	≥ 16	≥ -3.26	-4.58
I_{bias}			
I_{buf}			
I_{ref}		1	1
R_D	≤ 10	570	600
V_{lo}	≤ 1		
V_{rf}	≤ 1		

Even Revealing Lists and Images

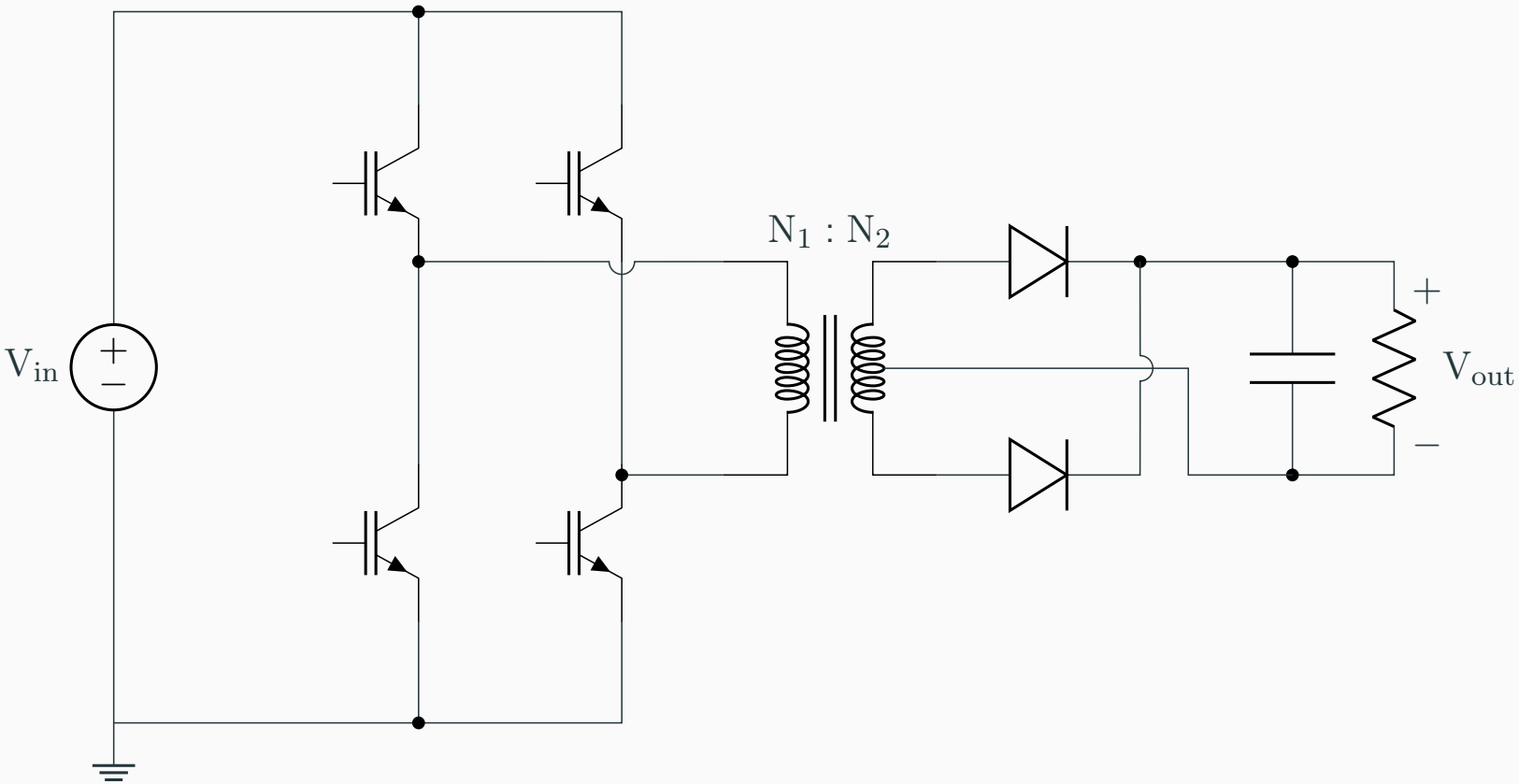

Figure 1: An Example of a circuit (an isolated boost converter) done in circuit TikZ

Equations

A Couple of Equations

$$\frac{\mathrm{dx}}{\mathrm{dt}} = \sigma(\mathrm{y} - \mathrm{x}) \tag{1}$$

$$\frac{\mathrm{dy}}{\mathrm{dt}} = \mathrm{x}(\rho - \mathrm{z}) - \mathrm{y} \tag{2}$$

$$\frac{\mathrm{dz}}{\mathrm{dt}} = \mathrm{xy} - \beta\mathrm{z} \tag{3}$$

$$\tag{4}$$

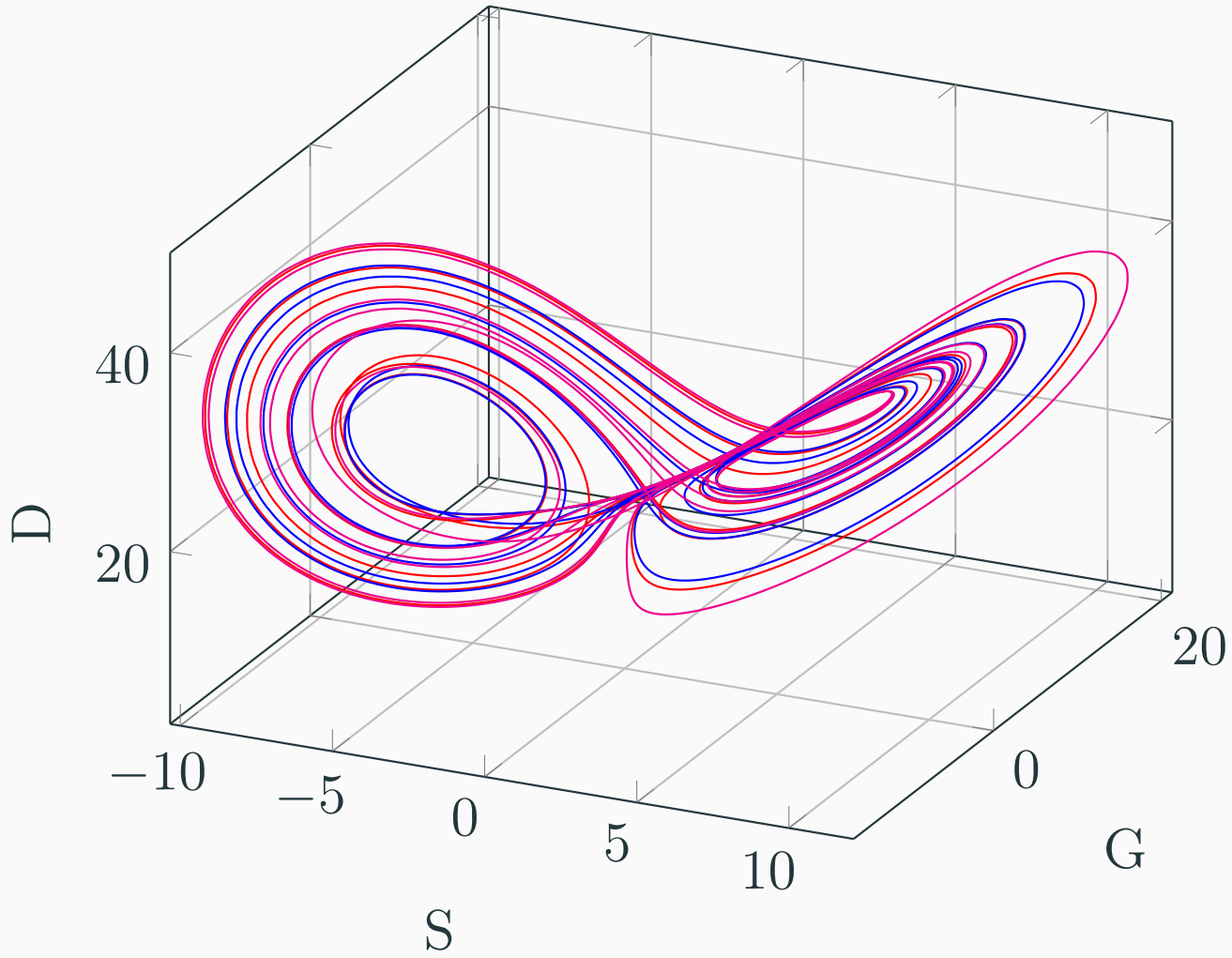

Figure 2: Lorenz Double Scroll Produced in LuaLatex

TikZ

TikZ Graphics

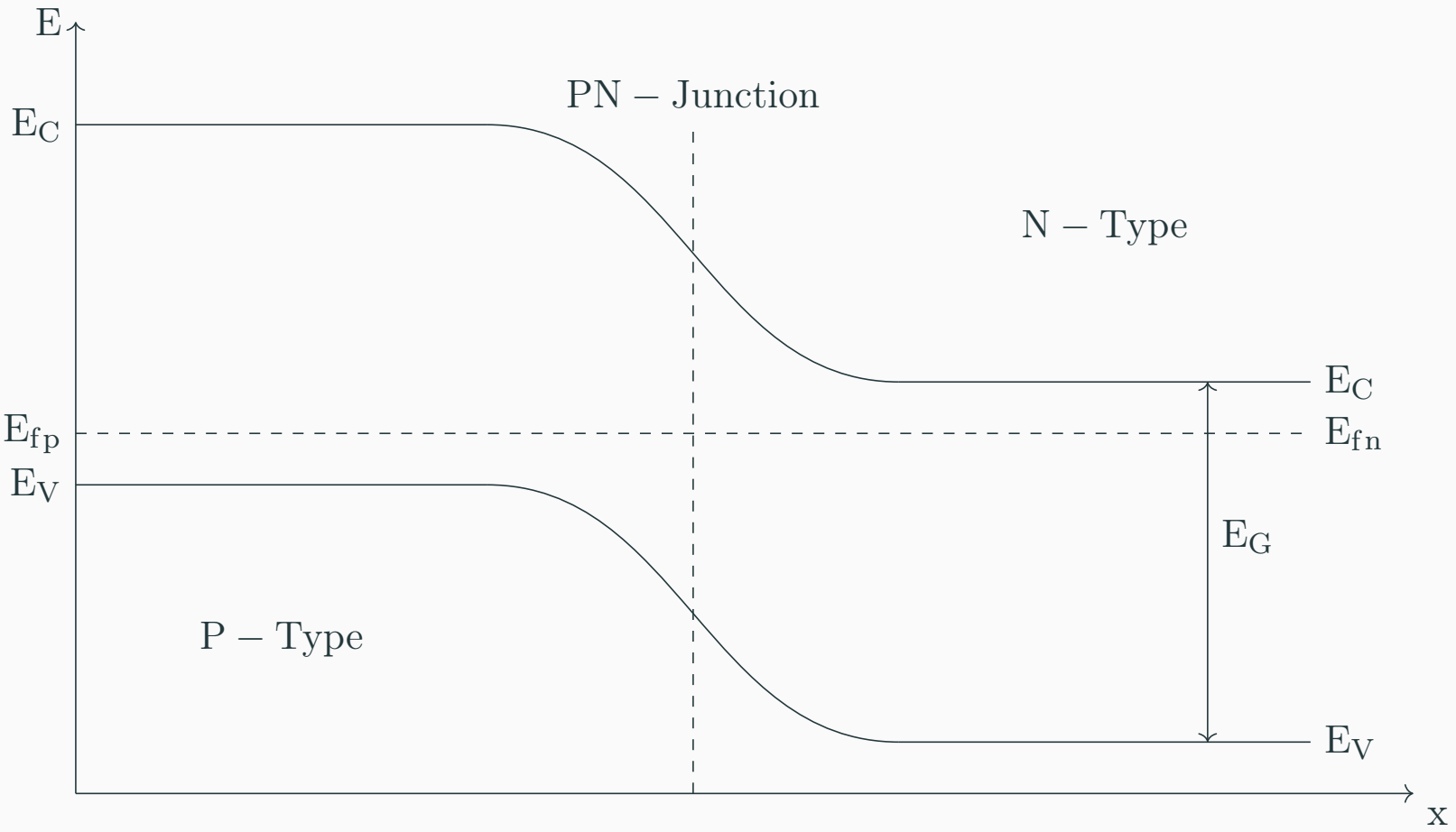

Figure 3: A simple Example TikZ showing the band diagram of a PN-junction

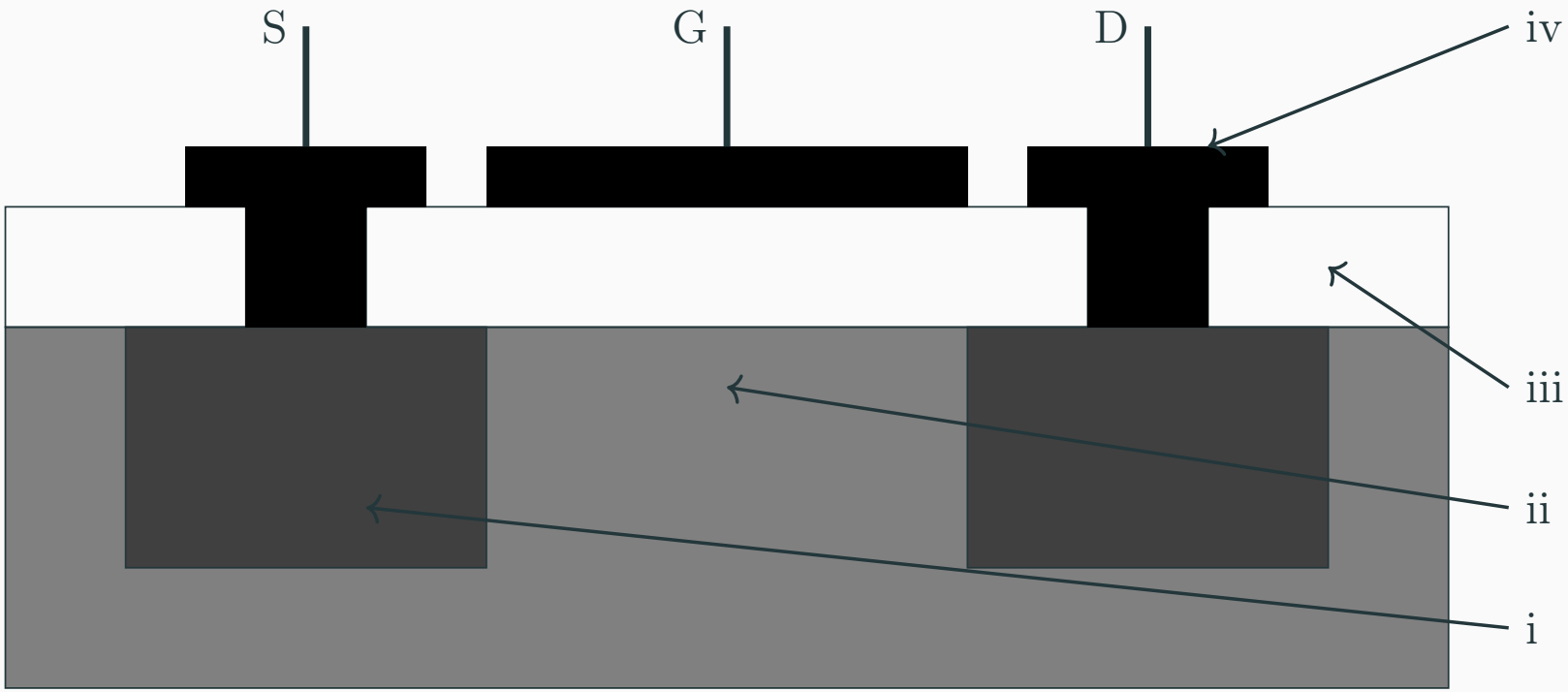

Figure 4: A simple TikZ diagram showing a MOSFET

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Acronyms

CWVM Cockroft-Walton voltage multiplier. Glossary: CWVM

HV High Vacuum. Glossary: HV

PIG Penning Ion Generator. Glossary: PIG

PTFE Polytetraflouroethylene. Glossary: PTFE

Glossary i

Constants i

Symbols

D Mosfet Drain. 8, 11

E_C Conduction band energy level. 10

E_G Bandgap. 10

E_V Valence band energy level. 10

E_f Fermi Energy of a Material. 10

E Energy. 10

G Mosfet Gate. 8, 11

S Mosfet Source. 8, 11

V_{in}	Input voltage. 5
V_{out}	Output voltage. 5
β	Lorenz Parameter. 7
ρ	Lorenz Parameter. 7
σ	Lorenz Parameter. 7