



Impedance modulator (30mA max.)

Fan in	C5	C8
30mA	10μF	220μF
20mA	22μF	100μF
10mA	47μF	100μF

C5: X5R
C8: ALU

1-12V adjustable Buck converter (150mA max.)

$V_{out} = 1V * (1 + R5 / R6)$
[R5 < 100k, R6 typ. 10k]

$C13 = 1 / (2\pi * R5 * 28kHz)$

Vout	L1	R5	R6	C13
1.0V	47μH	0R	--	--
3.3V	33μH	30k	13k	180pF
5.0V	30μH	40.2k	10k	150pF
7.5V*27μH	130k	20k	47pF	
12V	22μH	110k	10k	51pF

(*) 7.5V is the minimum voltage
for connection to VDD_REGIN

Soft-start time TSS:
 $TSS = 1V * C3 / 2.5\mu A$

C11: Vrated > Vout

3.3 V / 5 V linear regulator (20mA max.)

VccVore defines the μC interface logic level
Set SJ1 accordingly.

SJ2	
open	Lin.-Reg. on
short*	Lin.-Reg. off

SJ1	
1-2	5V
2-3	3.3V

*) Don't short if VOUT > 5V !!

STKNX Breakout Board

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