Standard NeuroMem Open Source architecture (4 clusters x 32 neurons -> 128) (~ 480 LUT/neuron, does not fit on ZYNQ7020)

C:/Users/Guy/X_projects/NeuroMem2018/NeuroMem2018.runs/synth_1/nm_top_utilization_synth.rpt

■ ← → % ■ ■ × // ■ ♀											
	Used	Fixed	Ava:	ilable	Ut	il%					
+	60945	. 0	i I	53200	1 114	.56					
LUT as Logic	60945	1 0	I	53200	114	.56					
LUT as Memory	0	0	I	17400	0	.00					
Slice Registers	20521	0	:	106400	19	.29					
Register as Flip Flop	20521	1 0	1 :	106400	19	.29					
Register as Latch	0	1 0	1 :	106400	1 0	.00					
F7 Muxes	1688	1 0		26600	6	.35					
F8 Muxes	0	1 0	I	13300	1 0	.00					
i +		+	+		+						
ation		Post-Synth	esis	Post-Imple	ementat	tion					
				Grapi	h Ta	ble					
LUT				11	15%						
FF - 19%											
10 - 24%											
BUFG 6%											
0 25 50		75	100		125						
Es	stimated Uti	lization (%)									

FTGA NeuroMem low cost architecture (4 clusters x 32 neurons -> 128) (~ 350 LUT/neuron, ZYNQ7020 extra 16% space available for feature extraction)

C:/Users/Guy/X_projects/FTGA_ZYNQ_7020/FTGA_ZYNQ_7020.runs/synth_1/nm_top_utilization_synth.rpt

	ı X	//		Q	_		
0 + 1 Site Type 2 +	Used	Fixed	 -	Available	-+- -+-	Util%	-+ -+
3 Slice LUTs*	44870	1 0	i	53200	i	84.34	i
4 LUT as Logic	44870	1 0	1	53200	1	84.34	I
LUT as Memory	1 0	1 0	1	17400	1	0.00	I
Slice Registers	18342	1 0	1	106400	1	17.24	I
7 Register as Flip Flop	18342	1 0	1	106400	1	17.24	I
8 Register as Latch	1 0	1 0	1	106400	1	0.00	I
9 F7 Muxes	1 24	1 0	1	26600	1	0.09	I
F8 Muxes	1 0	1 0	1	13300	-1	0.00	I
+	+	-+	-+-		-+-		-+
zation		Post-Synt	hesi	s Post-Imp	lem	entation	
				Grap	h	Table	
LUT-				84%			
FF - 17%				0470			
10 - 23%							
BUFG - 6%							
0 25	50	75		100			-
E	stimated Ut	ilization (%)					