## Multiplier-64

## March 25, 2012

## 1 Design Map

INFO_Pareto	0	0	0	0
TOP.DesignIndex		1	0 2	3
TOP.VT	"	_	_	_
TOP.VI TOP.Voltage	svt 0.8	svt 0.8	svt 0.8	svt 0.8
TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.MultP.BoothType	1	1	1	1
TOP.top_Multiplier.Multiplier.MultP.Designware_MODE	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.MultP.TreeType	Array	Array	OS1	OS1
$TOP. top\_Multiplier. Multiplier. Partial Product Sum. Adder Type$	DesignWare	Sklansky	DesignWare	Sklansk
$TOP.top\_Multiplier.Multiplier.UseInc$	NO	NO	NO	NO
TOP.top_Multiplier.Multiplier.Width	64	64	64	64
INFO_Pareto	0	0	0	0
TOP.DesignIndex	4	5	6	7
TOP.VT	svt	svt	svt	svt
TOP.Voltage	0.8	0.8	0.8	0.8
TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.MultP.BoothType	1	1	1	1
TOP.top_Multiplier.Multiplier.MultP.Designware_MODE	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.MultP.TreeType	Wallace	Wallace	ZM	ZM
TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType	DesignWare	Sklansky	DesignWare	Sklansk
TOP.top_Multiplier.Multiplier.UseInc	NO	NO	NO	NO
TOP.top_Multiplier.Multiplier.Width	64	64	64	64
INFO_Pareto	0	0	0	1
TOP.DesignIndex	8	9	10	11
TOP.VT	svt	svt	svt	svt
TOP.Voltage	0.8	0.8	0.8	0.8
$TOP.top\_Multiplier.Multiplier.Designware\_MODE$	OFF	OFF	OFF	OFF
$TOP. top\_Multiplier. Multiplier. MultP. Booth Type$	2	2	2	2
$TOP.top\_Multiplier.Multiplier.MultP.Designware\_MODE$	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.MultP.TreeType	Array	Array	OS1	OS1
TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType	DesignWare	Sklansky	DesignWare	Sklansk
TOP.top_Multiplier.Multiplier.UseInc	ŇO	NO	NO	NO .
TOP.top_Multiplier.Multiplier.Width	64	64	64	64

INFO_Pareto TOP.DesignIndex TOP.VT TOP.Voltage TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType TOP.top_Multiplier.Multiplier.MultP.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.UseInc TOP.top_Multiplier.Multiplier.UseInc	1 12 svt 0.8 OFF 2 OFF Wallace DesignWare NO 64	1 13 svt 0.8 OFF 2 OFF Wallace Sklansky NO 64	1 14 svt 0.8 OFF 2 OFF ZM DesignWare NO 64	1 15 svt 0.8 OFF 2 OFF ZM Sklansky NO 64
INFO_Pareto TOP.DesignIndex TOP.VT TOP.Voltage TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType TOP.top_Multiplier.Multiplier.MultP.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.UseInc TOP.top_Multiplier.Multiplier.Width	0 16 svt 0.8 OFF 3 OFF Array DesignWare NO 64	0 17 svt 0.8 OFF 3 OFF Array Sklansky NO 64	1 18 svt 0.8 OFF 3 OFF OS1 DesignWare NO 64	1 19 svt 0.8 OFF 3 OFF Wallace DesignWare NO 64
INFO_Pareto TOP.DesignIndex TOP.VT TOP.Voltage TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.UseInc TOP.top_Multiplier.Multiplier.UseInc	1 20 svt 0.8 OFF 3 OFF Wallace Sklansky NO 64	1 21 svt 0.8 OFF 3 OFF ZM DesignWare NO 64	0 22 svt 0.8 OFF 4 OFF Array DesignWare NO 64	0 23 svt 0.8 OFF 4 OFF Array Sklansky NO 64
INFO_Pareto TOP.DesignIndex TOP.VT TOP.Voltage TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType TOP.top_Multiplier.Multiplier.MultP.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.Pultiplie	0 24 svt 0.8 OFF 4 OFF Wallace DesignWare NO 64	0 25 svt 0.8 OFF 4 OFF Wallace Sklansky NO 64	1 26 svt 0.8 OFF NA ON NA DesignWare NO 64	1 27 svt 0.8 OFF NA ON NA Sklansky NO 64
INFO_Pareto TOP.DesignIndex TOP.VT TOP.Voltage TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType TOP.top_Multiplier.Multiplier.MultP.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.UseInc TOP.top_Multiplier.Multiplier.Width	28 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	svt s 0.9 0 0FF C 1 0 0FF C 0FF Sk 1 Skl NO 1	0 0 30 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1 t 9 9 F 5 5 1 Ware

INFO_Pareto	0	0	0	0
TOP.DesignIndex	32	33	34	35
TOP.VT	svt	svt	svt	svt
TOP.Voltage	0.9	0.9	0.9	0.9
TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.MultP.BoothType	1	1	1	1
TOP.top_Multiplier.Multiplier.MultP.Designware_MODE	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.MultP.TreeType				ZM
	OS1	Wallace	Wallace	
TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType	Sklansky	DesignWare	Sklansky	DesignWare
TOP.top_Multiplier.Multiplier.UseInc	NO	NO	NO	NO
TOP.top_Multiplier.Multiplier.Width	64	64	64	64
INFO_Pareto	0	1 0	0	0
TOP.DesignIndex	36	37	38	39
TOP.VT	svt	svt	svt	svt
TOP. Voltage	0.9	0.9	0.9	0.9
TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.MultP.BoothType	1	2	2	2
TOP.top_Multiplier.Multiplier.MultP.Designware_MODE	11	OFF	OFF	OFF
	OFF	_		
TOP.top_Multiplier.Multiplier.MultP.TreeType	ZM	Array	Array	OS1
TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType	Sklansky	DesignWare	Sklansky	DesignWare
TOP.top_Multiplier.Multiplier.UseInc	NO	NO	NO	NO
TOP.top_Multiplier.Multiplier.Width	64	64	64	64
INFO_Pareto	1	l 1	1	1   1
TOP.DesignIndex	40	41	42	43
TOP.VT	svt	svt	svt	svt
TOP.Voltage	0.9	0.9	0.9	0.9
TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	OFF	OFF
	2	_	2	2
TOP.top_Multiplier.Multiplier.MultP.BoothType		2		
TOP.top_Multiplier.Multiplier.MultP.Designware_MODE	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.MultP.TreeType	OS1	Wallace	Wallace	ZM
TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType	Sklansky	DesignWare	Sklansky	DesignWare
$TOP.top\_Multiplier.Multiplier.UseInc$	NO	NO	NO	NO
TOP.top_Multiplier.Multiplier.Width	64	64	64	64
INFO_Pareto	1	1 0	0 1	0
TOP.DesignIndex	44	45	46	47
TOP.VT	svt	svt	svt	svt
TOP.Voltage	0.9	0.9	0.9	0.9
TOP.voitage TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType	2	3	3	3
	_		OFF	
TOP.top_Multiplier.Multiplier.MultP.Designware_MODE	OFF ZM	OFF		OFF
TOP.top_Multiplier.Multiplier.MultP.TreeType		Array	Array	OS1
TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType	Sklansky	DesignWare	Sklansky	DesignWare
TOP.top_Multiplier.Multiplier.UseInc	NO	NO	NO	NO
TOP.top_Multiplier.Multiplier.Width	64	64	64	64
INFO_Pareto	0	1	1	0
TOP.DesignIndex	48	49	50	51
TOP.VT	svt	svt	svt	svt
TOP.V1 TOP.Voltage	0.9	0.9	0.9	0.9
TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	OFF	OFF
TOP.top_Multiplier.Multiplier.MultP.BoothType	3	3	3	4
$TOP. top\_Multiplier. Multiplier. MultP. Designware\_MODE$	OFF	OFF	OFF	OFF
$TOP.top\_Multiplier.Multiplier.MultP.TreeType$	Wallace	Wallace	ZM	Array
$TOP. top\_Multiplier. Multiplier. Partial Product Sum. Adder Type$	DesignWar		DesignWare	
TOP.top_Multiplier.Multiplier.UseInc	ŇO	NO	NO	NO
TOP.top_Multiplier.Multiplier.Width	64	64	64	64
	II 0-1	0.4	1 0-1	7-2

INFO_Pareto TOP.DesignIndex TOP.VT TOP.Voltage TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType TOP.top_Multiplier.Multiplier.MultP.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.UseInc TOP.top_Multiplier.Multiplier.UseInc	0 52 svt 0.9 OFF 4 OFF Array Sklansky NO 64	0 53 svt 0.9 OFF 4 OFF Wallace DesignWare NO 64	0 54 svt 0.9 OFF 4 OFF Wallace Sklansky NO 64	1 55 svt 0.9 OFF NA ON NA ON NA DesignWare NO 64
INFO_Pareto TOP.DesignIndex TOP.VT TOP.Voltage TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType TOP.top_Multiplier.Multiplier.MultP.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.UseInc TOP.top_Multiplier.Multiplier.Width	svt 0.9 OFF NA ON NA Sklansky NO	1 0 57 58 svt sv 0.9 1 ON OF NA 1 NA OF NA Arr NA Design NO NO 64	8 59 t syt 0 1.0 FF OFI 1 FF OFI ay Arra Ware Sklann D NO	? ? .y sky
INFO_Pareto TOP.DesignIndex TOP.VT TOP.Voltage TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType TOP.top_Multiplier.Multiplier.MultP.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.UseInc TOP.top_Multiplier.Multiplier.Width	0 60 svt 1.0 OFF 1 OFF OS1 DesignWare NO 64	0 61 svt 1.0 OFF 1 OFF OS1 Sklansky NO 64	0 62 svt 1.0 OFF 1 OFF Wallace DesignWare NO 64	0 63 svt 1.0 OFF 1 OFF Wallace Sklansky NO 64
INFO_Pareto TOP.DesignIndex TOP.VT TOP.Voltage TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType TOP.top_Multiplier.Multiplier.MultP.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.UseInc TOP.top_Multiplier.Multiplier.UseInc TOP.top_Multiplier.Multiplier.Width	0 64 svt 1.0 OFF 1 OFF ZM DesignWare NO 64	0 65 svt 1.0 OFF 1 OFF ZM Sklansky NO 64	0 66 svt 1.0 OFF 2 OFF Array DesignWare NO 64	0 67 svt 1.0 OFF 2 OFF Array Sklansky NO 64
INFO_Pareto TOP.DesignIndex TOP.VT TOP.Voltage TOP.top_Multiplier.Multiplier.Designware_MODE TOP.top_Multiplier.Multiplier.MultP.BoothType TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.MultP.TreeType TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType TOP.top_Multiplier.Multiplier.UseInc TOP.top_Multiplier.Multiplier.UseInc	0 68 svt 1.0 OFF 2 OFF OS1 DesignWare NO 64	1 69 svt 1.0 OFF 2 OFF OS1 Sklansky NO 64	1 70 svt 1.0 OFF 2 OFF Wallace DesignWare NO 64	1 71 svt 1.0 OFF 2 OFF Wallace Sklansky NO 64

INFO_Pareto	1	1 1	0	0	1
TOP.DesignIndex	72	73	74	75	
TOP.VT	svt	svt	svt	svt	i
TOP.Voltage	1.0	1.0	1.0	1.0	
TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	OFF	OFF	İ
TOP.top_Multiplier.Multiplier.MultP.BoothType	2	2	3	3	
TOP.top_Multiplier.Multiplier.MultP.Designware_MODE	OFF	OFF	OFF	OFF	
TOP.top_Multiplier.Multiplier.MultP.TreeType	ZM	ZM	Array	Array	
TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType	DesignWare	Sklansky	DesignWare	Sklansky	
TOP.top_Multiplier.Multiplier.UseInc	NO	NO	NO	NO	
TOP.top_Multiplier.Multiplier.Width	64	64	64	64	
101.top_Materplier.Waterplier.Water	04	04	04	01	
INFO_Pareto	0	0	1	1	1
TOP.DesignIndex	76	77	78	79	
TOP.VT	svt	svt	svt	svt	
TOP.Voltage	1.0	1.0	1.0	1.0	
TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	OFF	OFF	
TOP.top_Multiplier.Multiplier.MultP.BoothType	3	3	3	3	
TOP.top_Multiplier.Multiplier.MultP.Designware_MODE	OFF	OFF	OFF	OFF	- 1
TOP.top_Multiplier.Multiplier.MultP.TreeType	OS1	Wallace	Wallace	ZM	- 1
TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType	DesignWare	DesignWar	e Sklansky	DesignWare	i
TOP.top_Multiplier.Multiplier.UseInc	NO	NO	NO	NO	ł
TOP.top_Multiplier.Multiplier.Width	64	64	64	64	
1 01 Nop_Manaphormatorphorm	01	01			
	Ï				_
INFO_Pareto	0	0	0	0	
TOP.DesignIndex	80	81	82	83	
TOP.VT	svt	svt	svt	svt	İ
TOP.Voltage	1.0	1.0	1.0	1.0	İ
TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	OFF	OFF	
TOP.top_Multiplier.Multiplier.MultP.BoothType	4	4	4	4	
TOP.top_Multiplier.Multiplier.MultP.Designware_MODE	OFF	OFF	OFF	OFF	
TOP.top_Multiplier.Multiplier.MultP.TreeType	Array	Array	Wallace	Wallace	
TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType	DesignWare	Sklansky	DesignWare	Sklansky	
TOP.top_Multiplier.Multiplier.UseInc	NO	NO	NO	NO	
TOP.top_Multiplier.Multiplier.Width	64	64	64	64	
					_
INFO_Pareto	1	1	1		
TOP.DesignIndex	84	85	86		
TOP.VT	svt	svt	svt		
TOP.Voltage	1.0	1.0	1.0		
TOP.top_Multiplier.Multiplier.Designware_MODE	OFF	OFF	ON		
TOP.top_Multiplier.Multiplier.MultP.BoothType	NA	NA	NA		
TOP.top_Multiplier.Multiplier.MultP.Designware_MODE	ON	ON	NA		
TOP.top_Multiplier.Multiplier.MultP.TreeType	NA	NA	NA		
TOP.top_Multiplier.Multiplier.PartialProductSum.AdderType	DesignWare	Sklansky	NA		
TOP.top_Multiplier.Multiplier.UseInc	0 0				
	II NO	INO	I NO I I		
TOP.top_Multiplier.Multiplier.Width	NO 64	NO 64	NO 64		























