

Lab1: number of slices: 25 of 14752 (1%)
 Lab2: number of slices: 105 of 14752 (1%)
 Lab3: number of slices: 62 of 14752 (1%)
 Lab⁵: number of slices: ~~62~~ ¹⁴⁴⁶ of 14752 (9.8%)
 microblaze: number of slices: 966 of 14752 (7%)

1 Slice = 700 rbc
 = 1481 rbc
 = 1A (1m² space)

Lab1: $25 \times 700 = 17500 \text{ rbc} = 17500 / 1481 = 12 \text{ A}$
 Lab2: $105 \times 700 = 73500 \text{ rbc} = 73500 / 1481 = 50 \text{ A}$
 Lab3: $62 \times 700 = \cancel{43400 \text{ rbc}} = 43400 / 1481 = 30 \text{ A}$
 Lab5: $1446 \times 700 = 1008700 = 1008700 / 1481 = 681 \text{ A}$
 microblaze: $966 \times 700 = 676200 = 676200 / 1481 = 457 \text{ A}$

$$\text{Bus} = 12 + 50 + 30 + 681 + 457 = 7355 \text{ A}$$

$$45 \text{ nm} = 493.93$$

$$\text{Pd} = 0.15 \rightarrow \text{yield} = e^{-\text{PdA}}$$

$$\text{logical Area} = 7355 \text{ A} / 493.93 = 15 \text{ A}$$

$$\text{frame area} = 0.12 \times 15 = 1.8 \approx 2 \text{ A}$$

$$\text{total} = 15 \text{ A} + 2 = 17 \text{ A}$$

$$\text{yield} = e^{-(0.15)} \times (0.017) = 0.99 \times 100 = 99\%$$

17A	17A	17A	
micro Blaze	Lab1	Lab3	66A
Bus			26A
			40A