

## SPI SLAVE DESIGN PARAMETERS

Technology Used: osu018(18nm Technology)

Total Area: 6589.08 (units sq) Microns

### PLACEMENT ANALYSIS:

Total stdcells	131
Total cell width	5.66e+04
Total cell height	1.31e+05
Total cell area	5.66e+07
Total core area	5.66e+07
Average cell height	1.00e+03
<b>FINAL NUMBER OF ROUTING TRACKS</b>	37

### 6 routing layers

**Metal1:** 64 vertical tracks from 0um with 1um pitch

**Metal2:** 128 vertical tracks from -3.2um with 0.8um pitch

**Metal3:** 64 vertical tracks from 0um with 1um pitch

**Metal4:** 128 vertical tracks from -3.2um with 0.8um pitch

**Metal5:** 64 vertical tracks from 0um with 1um pitch

**Metal6:** 64 vertical tracks from -3.2um with 1.6um pitch

**Summary:** Total components = 131

Longest row has width 95.6 um.

### PRE ROUTE-STA:

Computed maximum clock frequency (zero margin) = **726.423 MHz**

setup at destination = **137.573**

hold at destination = **-3.75179**

### ROUTING ANALYSIS:

Total number of routes completed by the end of stage 3 are 839 with 0 failed routed.

### POST ROUTE-STA:

Computed maximum clock frequency (zero margin) = **702.022 MHz**

setup at destination = **138.456**

hold at destination = **-3.6104**