

The Gantt chart illustrates the execution of 8 processes (P1-P8) on a 4-processor system. The horizontal axis represents time from 0 to 8. The vertical axis represents the processors, with a dashed line at time 6 indicating a change in the processor assignment for processes P1-P4.

Processes and their execution details:

- P1 (Red):** Executes on processors 1, 2, 3, and 4 from time 0 to 7. It has a value of 1 in the first section and 2 in the second section.
- P2 (Orange):** Executes on processors 1, 2, 3, and 4 from time 0 to 7. It has a value of 2 in the first section and 1 in the second section.
- P3 (Green):** Executes on processors 1, 2, 3, and 4 from time 0 to 7. It has a value of 2 in the first section and 1 in the second section.
- P4 (Blue):** Executes on processors 1, 2, 3, and 4 from time 0 to 7. It has a value of 4 in the first section and 2 in the second section.
- P5 (Brown):** Executes on processors 1, 2, 3, and 4 from time 0 to 7. It has a value of 1 in the first section and 2 in the second section.
- P6 (Pink):** Executes on processors 1, 2, 3, and 4 from time 0 to 7. It has a value of 1 in the first section and 2 in the second section.
- P7 (Yellow):** Executes on processors 1, 2, 3, and 4 from time 0 to 7. It has a value of 1 in the first section and 2 in the second section.
- P8 (Cyan):** Executes on processors 1, 2, 3, and 4 from time 0 to 7. It has a value of 2 in the first section and 1 in the second section.

The timeline at the bottom shows the state of the 4 processors over time. The processors are represented by horizontal bars of different colors (blue, orange, green, red, purple, brown, pink, yellow, cyan). The timeline shows that the processors are busy from time 0 to 7, with a gap between time 6 and 7. The processors are then busy again from time 7 to 8.

Timestamp (125MHz FPGA clock ticks)