

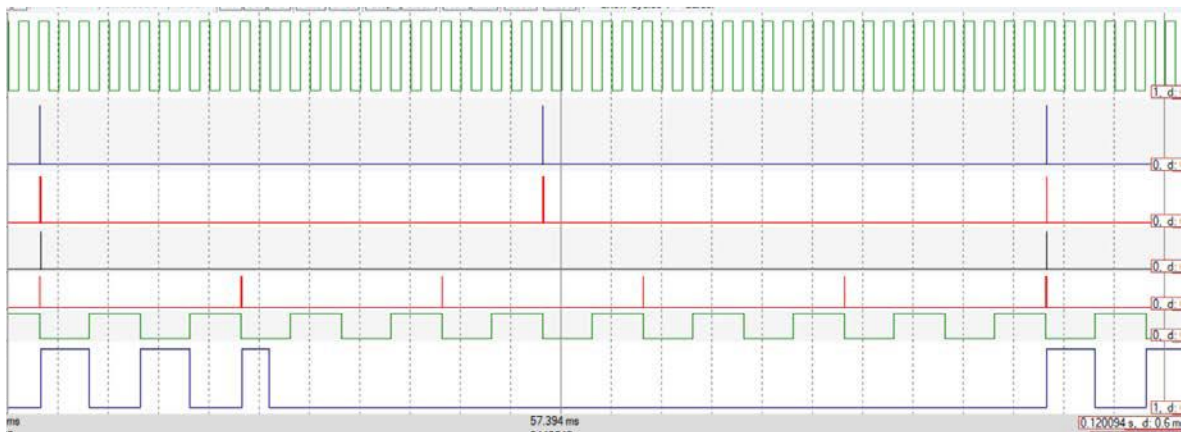


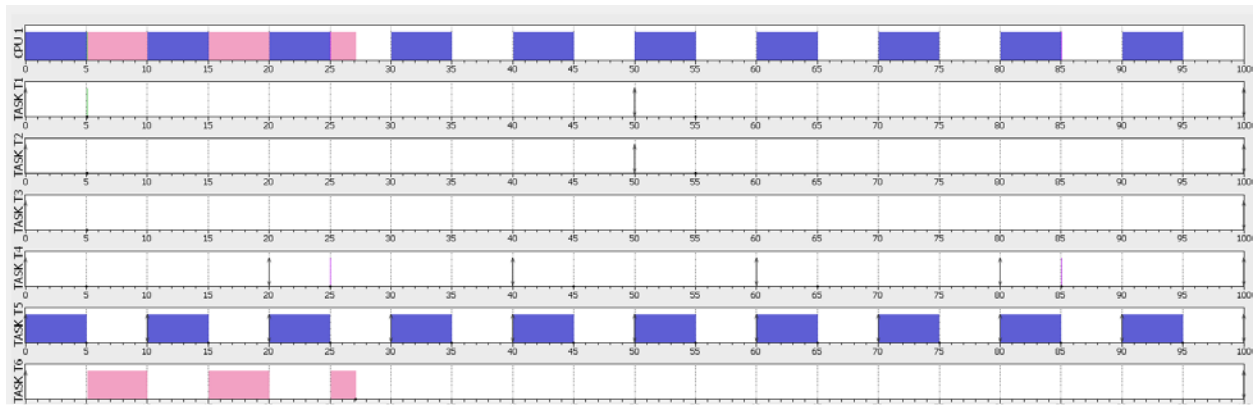
## Advanced Embedded Systems Project 2

### Implementing EDF Scheduler

# 1. Using analytical methods calculate the following for the given set of tasks:

- Calculate the system hyper period
  - ✓ 100 ms
- Calculate the CPU load
  - ✓ 62.2 %
- Check system schedulability using URM and time demand analysis techniques (Assuming the given set of tasks are scheduled using a fixed priority rate-monotonic scheduler)
  - ✓  $(2 \cdot (12\mu s / 50ms) + (20\mu s / 100) + (22\mu s / 20ms) + (5ms / 10ms) + (12ms / 100ms)) < 1$  so system is schedulable





The results from simso match the signals displayed by the logic analyzer in keil.

|         | Total load | Payload | System load |
|---------|------------|---------|-------------|
| CPU 1   | 0.6220     | 0.6220  | 0.0000      |
| Average | 0.6220     | 0.6220  | 0.0000      |
|         |            |         |             |

CPU load equals the cpu load calculated practically in keil