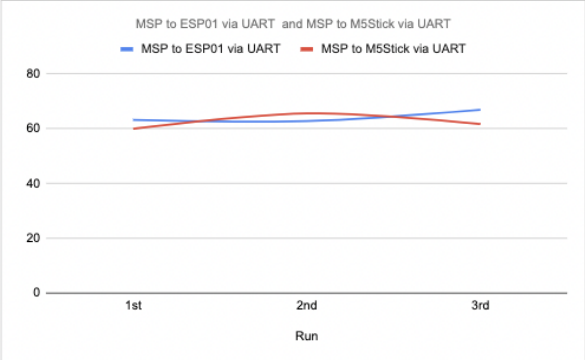
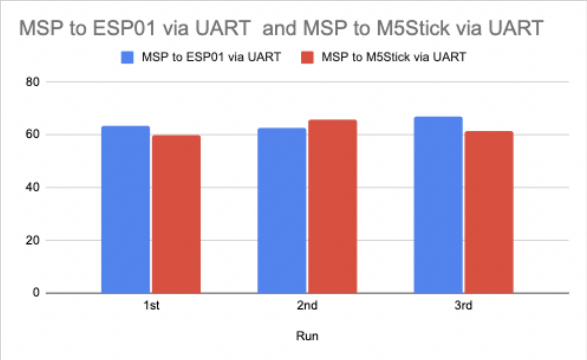
AY 2022 CSC2003 Embedded Systems and Sensor Programming
Team A3 - Communication

The Illustration for Throughput performance





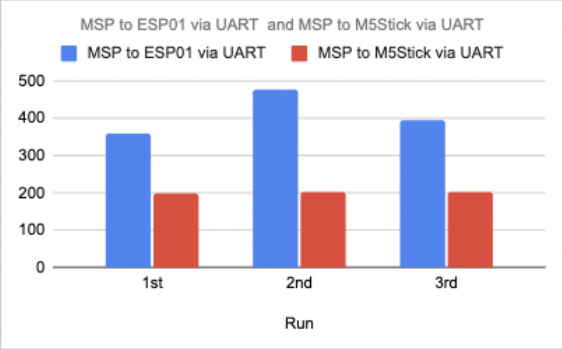
32KB	Throughput (KB)	
Run	MSP to ESP01 via UART	MSP to M5Stick via UART
1st	63.20657409	59.88019419
2nd	62.71283745	65.53620887
3rd	66.84301723	61.60132404
Average	64.25414292	62.33924237

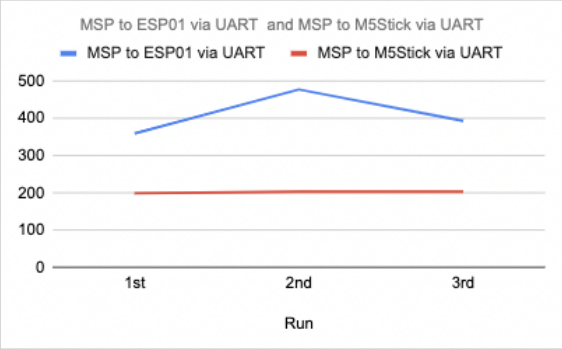
How Throughput Was Measured

MSP to ESP01 via UART	Throughput is measured by the rate of sending 32KB from our MSP to our server
MSP to M5StickC via UART	

Based on the figure above, M5StickC is slightly faster than the ESP-01.

The Illustration for Latency performance





100 request	Latency(s)	
Run	MSP to ESP01 via UART	MSP to M5Stick via UART
1st	359.6466446	199.6787572
2nd	477.5167799	203.7967197
3rd	393.4435797	203.9015325
Average	410.2023347	202.4590031

How Latency Was Measured

MSP to ESP01 via UART	Latency is measured by the time it takes to send 100 request from our MSP to the server
MSP to M5StickC via UART	

From the moment it takes its first request to the last request, we calculated the time difference to measure the latency. From this data, we can see that the M5tickC is way faster than the ESP-01.