Autonomous Platform – System Design and Requirements

1.1 – Physical System

Jetson TX2 Functions:

Vision Processing

Location and Mapping

Trajectory Generation

Roborio Functions:

Trajectory Execution

Misc IO Handling

IO & System Verification

1.2 – Communication protocol

Roborio to Jetson:

UDP:

RIO to Driver Station

Network Tables:

Wheel odometry localization

Jetson to Roborio:

UDP:

Driver Station to RIO

Network Tables:

Open loop control / driver input

Calculated trajectories