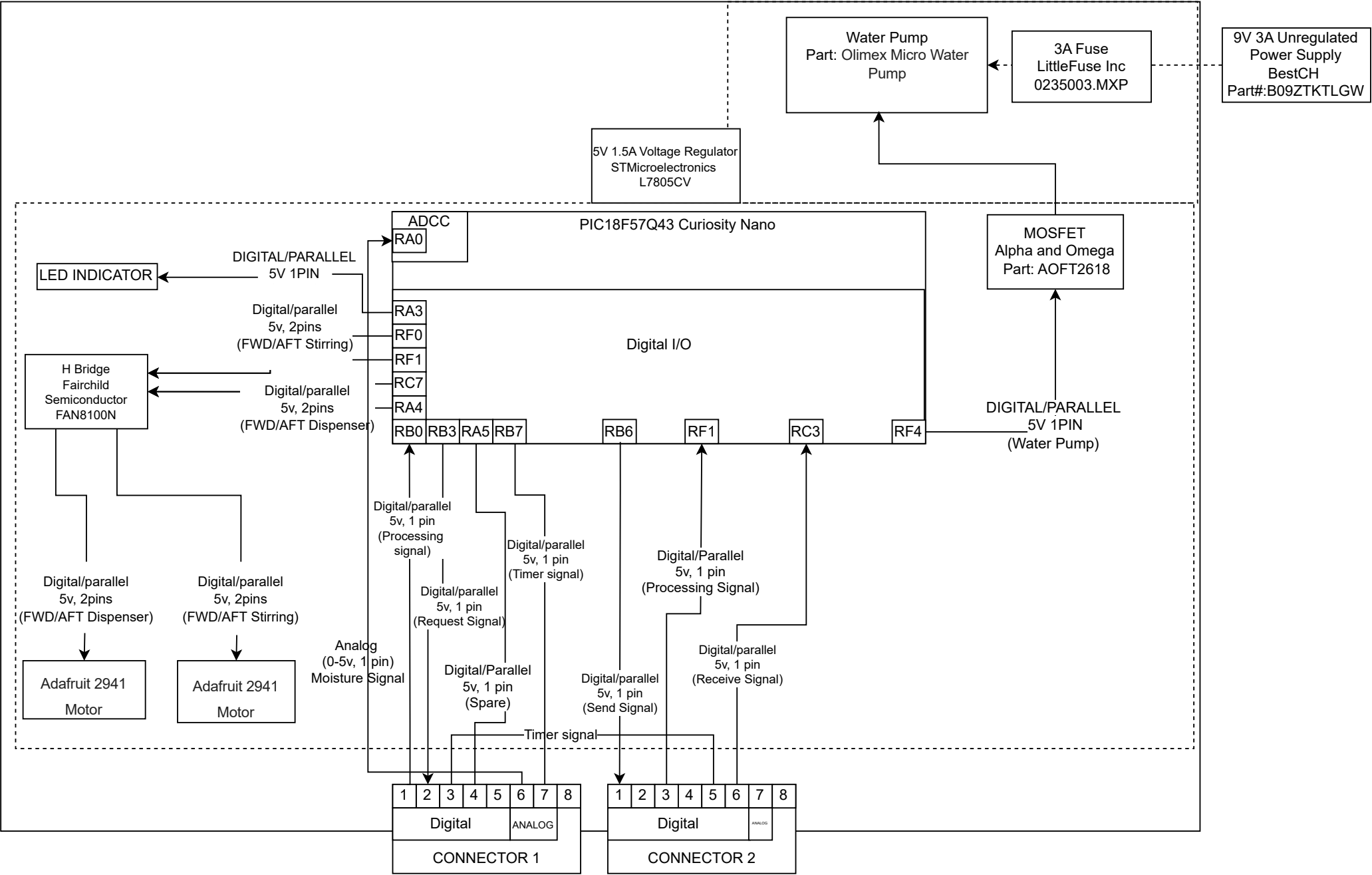


The diagram illustrates the system architecture for the PIC18F57Q43 Curiosity Nano. The central component is the PIC18F57Q43 Curiosity Nano, which includes an ADCC (Analog-to-Digital Converter) with DAC Backup, DAC1, and various digital I/O pins (RB0, RB6, RD0, RC7, RE2, RF0, RA5-6, RA1, RD6, RD7, RD5, RB5, RF2). The system is powered by a 9V 3A Unregulated Power Supply (BestCH B09ZTKTLGW) connected to a 3A Fuse (LittleFuse Inc 0235003.MXP) and a 5V 1.5A Voltage Regulator (STMicroelectronics L7805CV). The power supply also feeds a 5V Digital Power Supply (BestCH B09ZTKTLGW). The system includes an Analog 0-5v, 1 pin (Moisture Signal) connected to the ADCC and a Digital 5v, 1 pin (Moisture Signal) connected to the DAC Backup. The system also features a Handmade Resistive Sensor setup connected to the ADCC and a Debugging LED (Würth Elektronik 151051BS04000) connected to the Digital I/O pins. The system is controlled by a Digital 5v, 1 pin (Request Signal) and a Digital 5v, 1 pin (Processing signal). The system includes a Jumper Pin Array, a Push Button (Same Sky TS02-66-60-BK-160-LCR-D), and two Limit Switches (Würth Elektronik 463093691402) for reverse and forward limits. The system is connected to a motor (Fairchild Semiconductor 711) via an H Bridge (Fairchild Semiconductor FAN8100N) and a Digital 9v, 2pins signal. The system is also connected to a 5V Digital Power Supply (BestCH B09ZTKTLGW) and a 5V 1.5A Voltage Regulator (STMicroelectronics L7805CV).

Water Distribution Pump Block Diagram -- Team 102: Autonomous Plant Watering System

Austin Gonzalez



Block Diagram -- Team 102: Internal Reservoir System
Team Members: Terry Williams, Jacob Dirks, Austin Gonzalez, David

