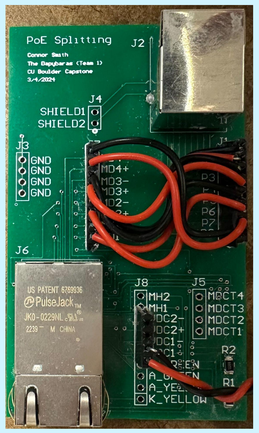
Power Your Home with X-PoE

Reduce wiring costs by 1000% and increase efficiency by 10%

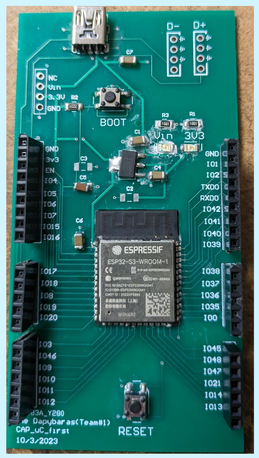
X-PoE is a proprietary, high voltage Power over Ethernet system that was developed by our sponsor, LUUM.io that can deliver up to 120W through a single CAT5e cable.

Our Journey

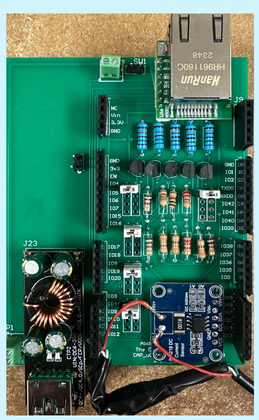
Problem 1:
Separate power and data from X-PoE line
Our Solution:
Custom PCB designed to split the power and data for one outlet, and recombine for use in another outlet.

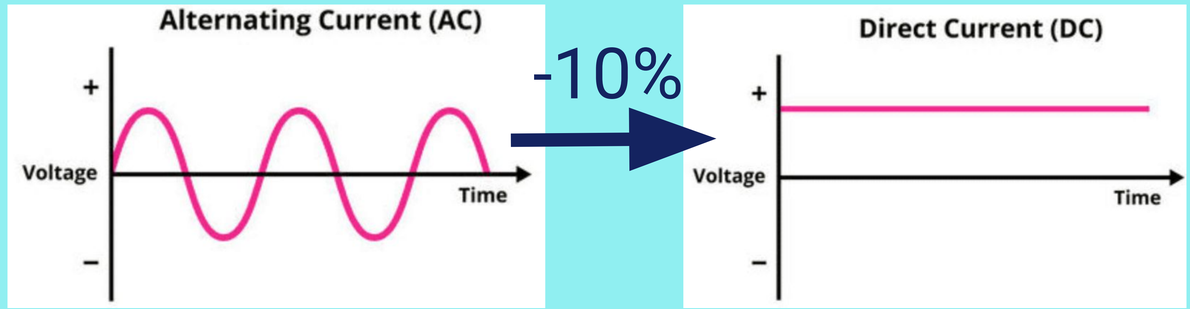


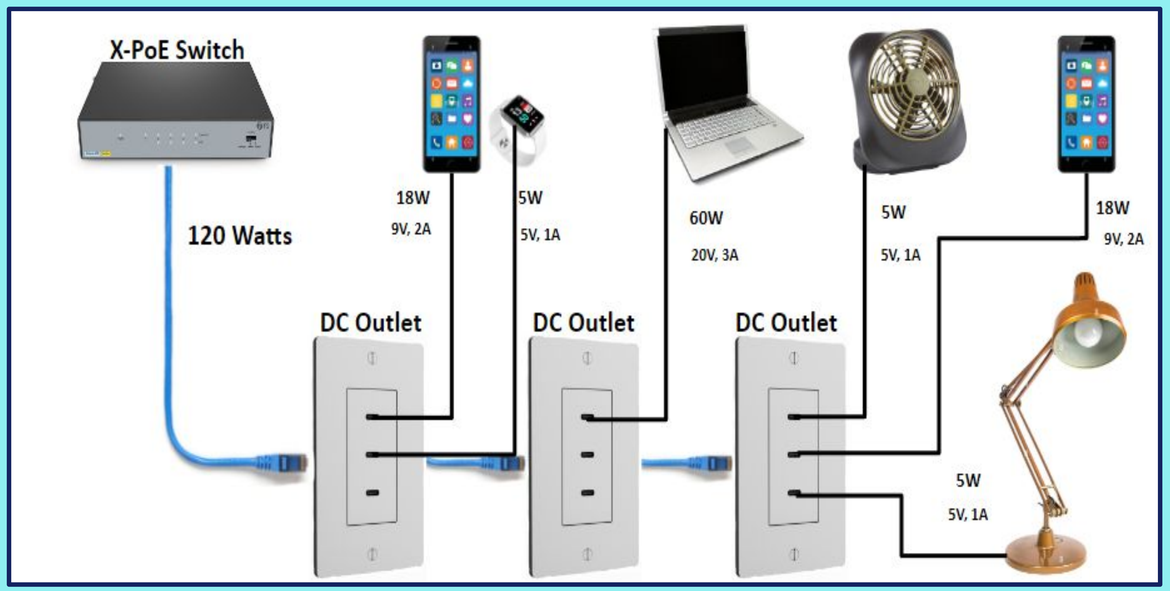
Problem 2:
Control each outlet and the whole system internally to the connected outlets.
Our Solution:
One ESP32-S3 controller installed in each outlet. One parent in system all others as children.



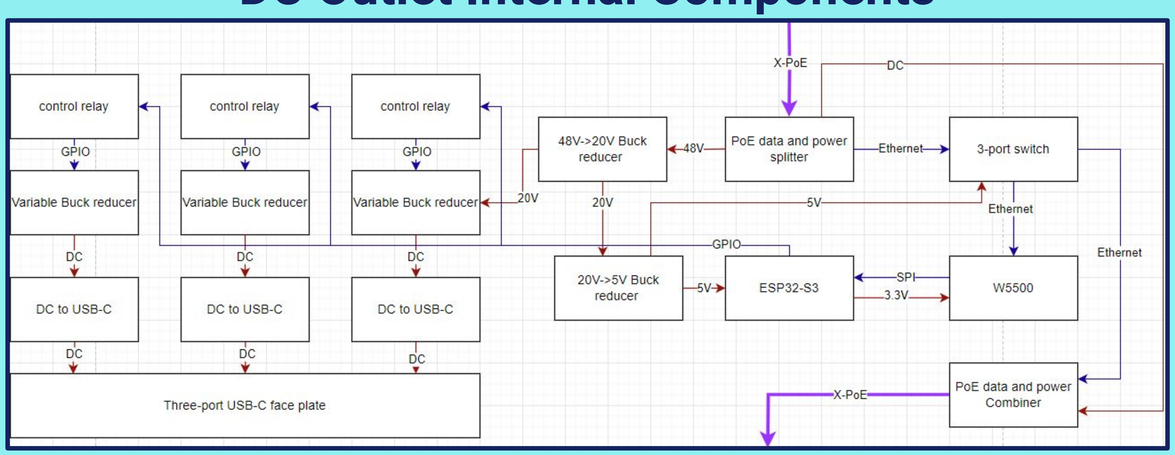
Problem 3:
Set USB-C profiles dynamically.
Our Solution:
GPIO Relay which sets voltage on buck converter according GPIO input from ESP32-S3

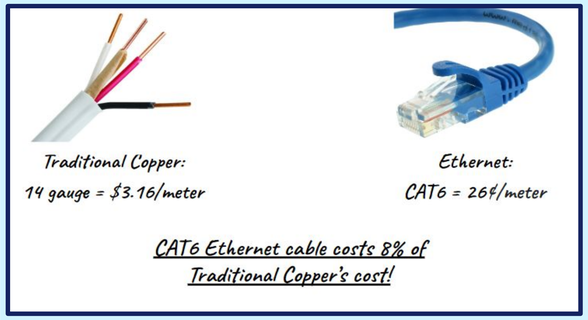






DC Outlet Internal Components





Our product takes in one PoE input and is able to deliver power to 9+ different devices. This is done by daisy chaining the PoE signal from one output to another, allowing customers to have multiple PoE connections being driven by one source.

Our Team
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