

Edge Processing Unit

The Way to Efficient Edge Computing for Industry 4.0

Industrie 2025

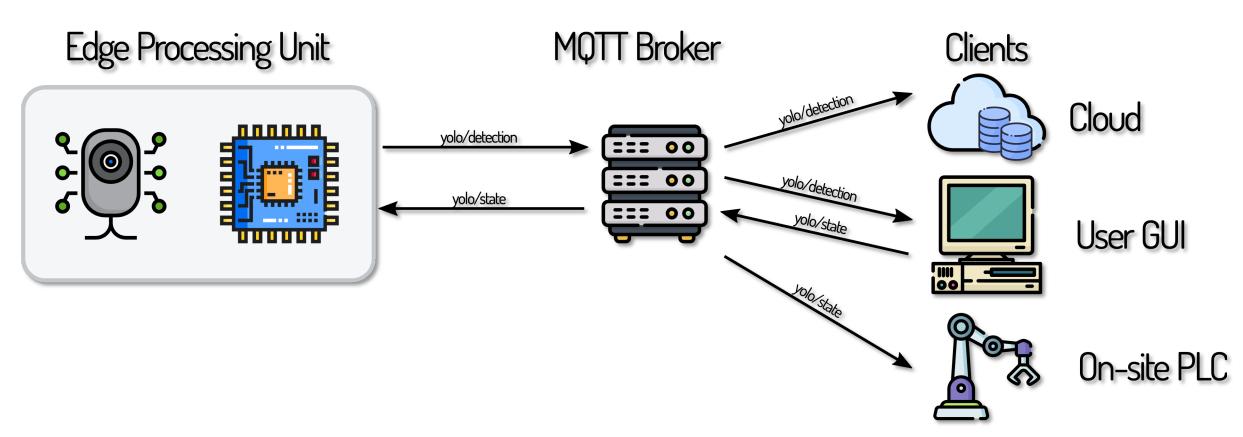
Partners







Setup



Icons made by Freepik from Flaticon

Hardware / Software



ARM

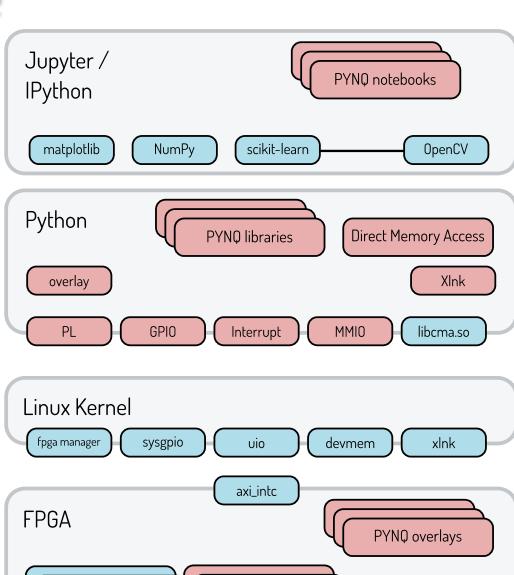
SDSoC.

Software

Hardware

Application





PYNQ IPs

User IPs

Apps

APIs

Drivers

Hardware

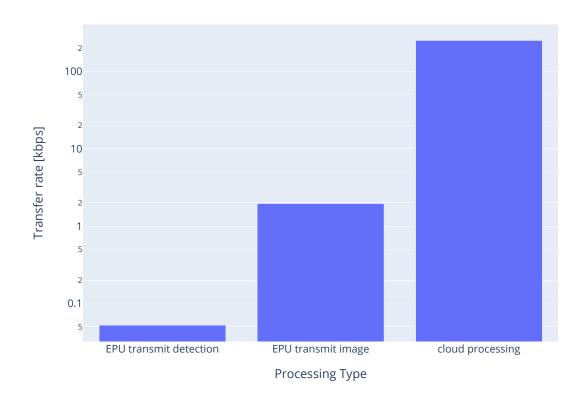
Accelerator

Results

Overall Detection Rate

detection ok person out of range lighting problems not detected 13.3% 60.1%

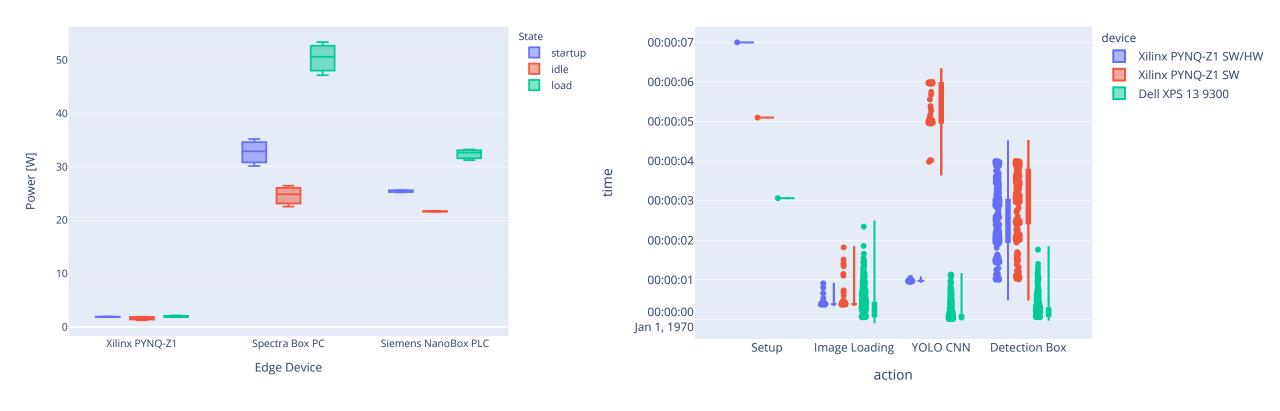
Data Transferrate



Results

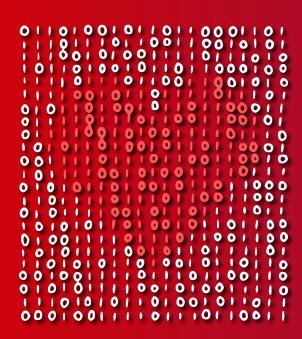
Energy Consumption

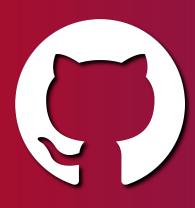
Speed



Thank you for your attention







Get the source



Contact me

Hes.so WALAIS
WALLIS



WHY ARE THERE MIRRORS ABOVE BEDS WHY HAVE DINOSAURS NO FUR WHY ARE SWISS AFRAID OF DRAGONS RWHY IS THERE A LINE THROUGH HTTPS WHY DO I SAY UH? HY IS HTTPS IMPORTANT QUESTIONS WHY IS SEA SALT BETTER WHY ARE THERE TREES IN THE MIDDLE OF FIELDS WHY AREN'T MY WHY IS THERE NOT A POKEMON MMO ARMS GROWING WHY IS THERE LAUGHING IN TV SHOWS WHY ARE THERE DOORS ON THE FREEWAY WHY ARE THERE SO MANY SVCHOST·EXE RUNNING CAN BE ASKED BY ANYONE ANYTIME WHY AREN'T ANY COUNTRIES IN ANTARCTICA WHY ARE THERE SCARY SOUNDS IN MINECRAFT WHY IS THERE KICKING IN MY STOMACI WHY AREN'T ECONOMISTS RICH WHY ARE THERE TWO SLASHES AFTER HT WHY ARE THERE SO MANY CROWS IN ROCHESTER & & WHY ARE THERE CELEBRITIES WHY DO AMERICANS CALL IT SOCCER TO WHY IS TO BE OR NOT TO BE FUNNY WHY DO SNAKES EXIST WHY ARE MY EARS RINGING WHY DO CHILDREN GET CANCER > > WHY DO OYSTERS HAVE PEARLS WHY IS 42 THE ANSWER TO EVERYTHING ? WHY ARE DUCKS CALLED DUCKS WHY IS POSEIDON ANGRY WITH ODYSSEUS TIT WHY CAN'T NOBODY ELSE LIFT THORS HAMMER S WHY DO THEY CALL IT THE CLAP S WHY IS THERE ICE IN SPACE WHY IS MARVIN ALWAYS SO SAD WHY ARE KYLE AND CARTMAN FRIENDS WHY IS THERE AN ARROW ON AANG'S HEAD 🔨 WHY ARE THERE WHY ARE TEXT MESSAGES BLUE WHY ARE THERE MUSTACHES ON CLOTHES WHY IS THERE AN OWL IN MY BACKYARD WHY IS EARTH TILTED & WHY WUBA LUBBA DUB DUB MEANING WHY ARE THERE WHY IS SPACE BLACK WHY IS THERE A WHALE AND A POT FALLING WHY IS THERE AN OWL OUTSIDE MY WINDOW **GHOSTS** WHY ARE THERE SO MANY BIRDS IN SWISS WHY IS OUTER SPACE SO COLD WHY IS THERE AN OWL ON THE DOLLAR BILL WHY IS THERE SO LITTLE RAIN IN WALLIS WHY ARE THERE PYRAMIDS ON THE MOON WHY IS NASA SHUTTING DOWN 3 VALLIS WEATHER FORECAST ALWAYS WRONG WHY DO OWLS ATTACK PEOPLE ARE THERE MALE AND FEMALE BIKES WHY ARE FPGA'S EVERYWHERE BRIDESMAIDS & WHY ARE THERE TINY SPIDERS IN MY HOUSE ₹WHY DO SPIDERS COME INSIDE WHY ARE THERE HELICOPTERS CIRCLING MY HOUSE TO WHY ARE THERE HUGE SPIDERS IN MY HOUSE IN WHY ARE MY BOOBS ITCHY WHY ARE THERE WHY ARE THERE GODS WHY ARE THERE LOTS OF SPIDERS IN MY HOUSE WHY ARE CIGARETTES LEGAL SQUIRRELS WHY ARE THERE DUCKS IN MY POOL WHY ARE THERE SPIDERS IN MY ROOM WHY IS JESUS WHITE WHAT IS https://xkcd·com/1256/ WHY ARE THERE SO MANY SPIDERS IN MY ROOM WHY IS THERE LIQUID IN MY EAR WHY DO SPYDER BITES ITCH WHY DO THEY SAY T-MINUS WHY DO Q TIPS FEEL GOOD HY IS DYING SO SCARY WHY ARE THERE OBELISKS WHY AREN'T RE WRESTLERS ALWAYS WET W THERE GUNS IN HARRY POTTER

References



[1] Xilinx. (2020, June). PYNQ - Python productivity for Zynq. http://www.pynq.io/

[2] This presentation has been designed using resources from Flaticon.com and Fontawesome.com