

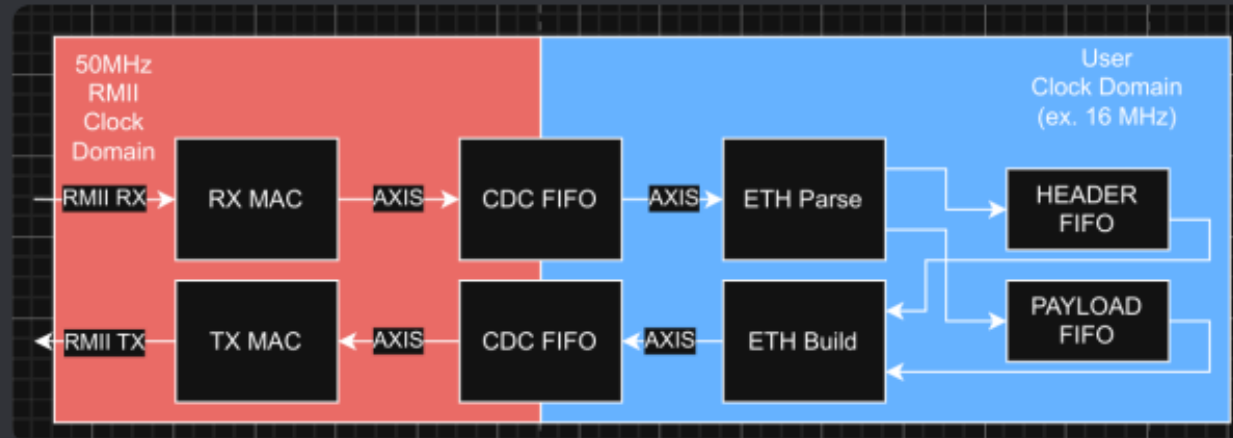
\*\*\*\*\*Default\*\*\*\*\*

## PipelineC Ethernet PMOD

02/17/25

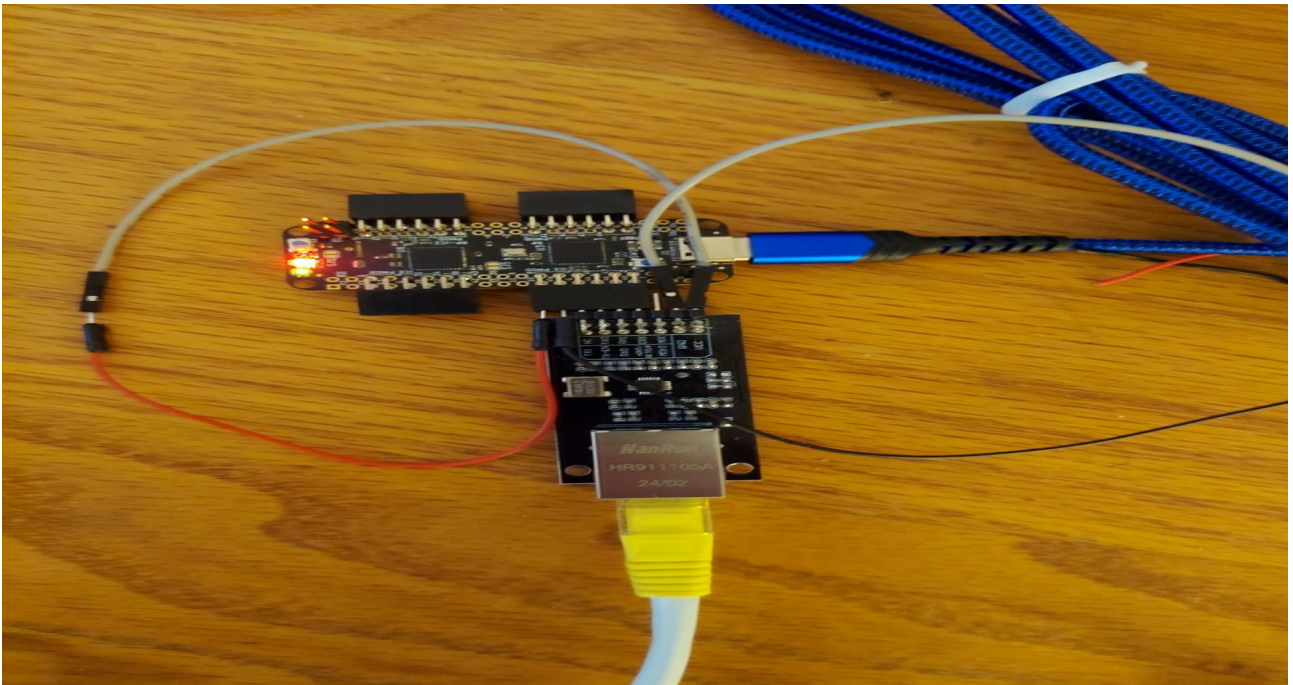
\*\*\*\*\*Default\*\*\*\*\*

this is what the current design implements

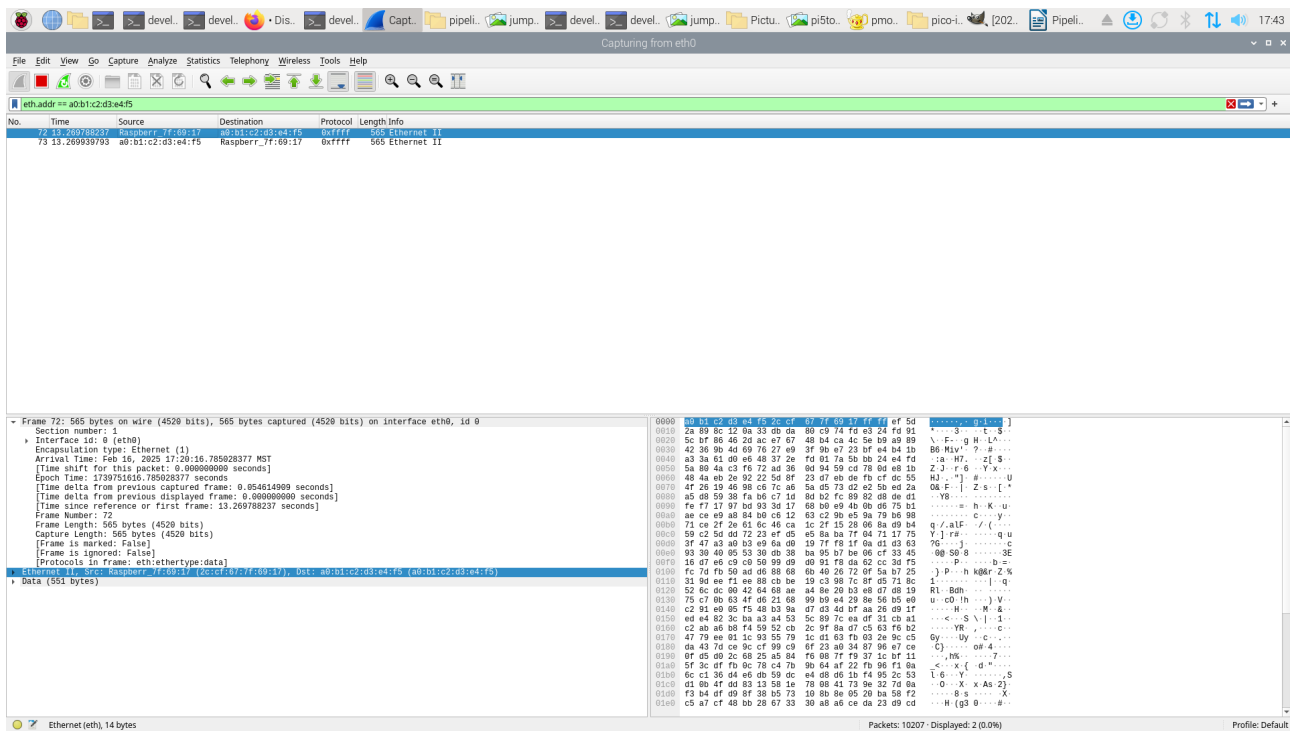


AXIS buses are 8b wide  
user clock could be as low as  $50M/4 = 12.5M$

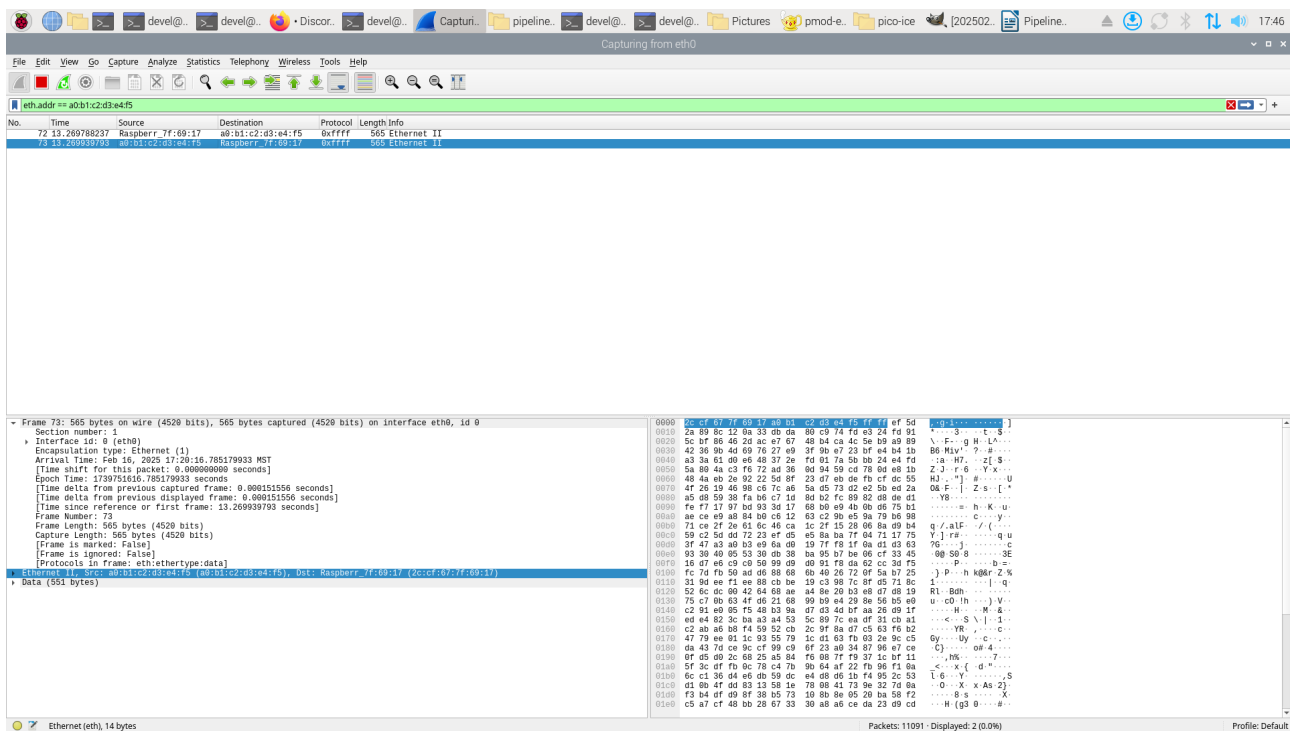
pico-ice Running gateway.bin provided by Discord user absurdfatalism. Led blink red.



```
raspberry-pi-5 devel@pi5-90:~/PipelineC/examples/arti/src/eth $ sudo ./loopback_test
```

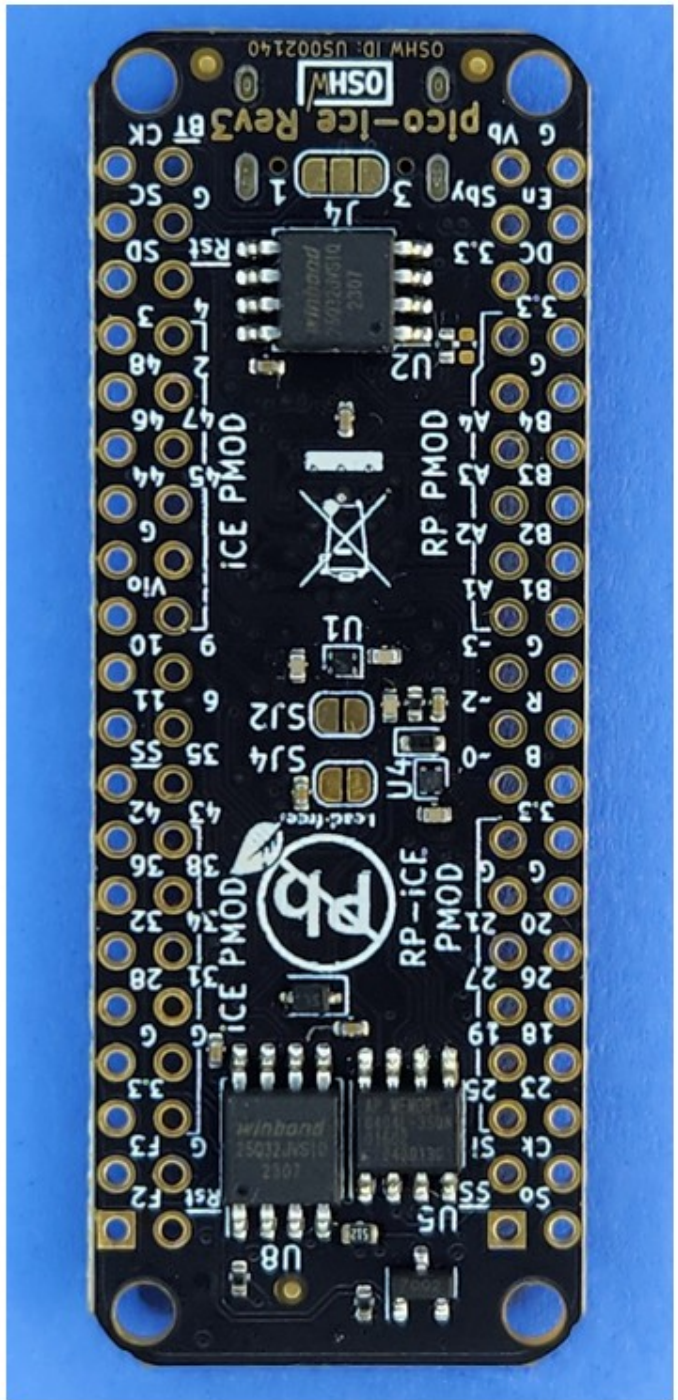
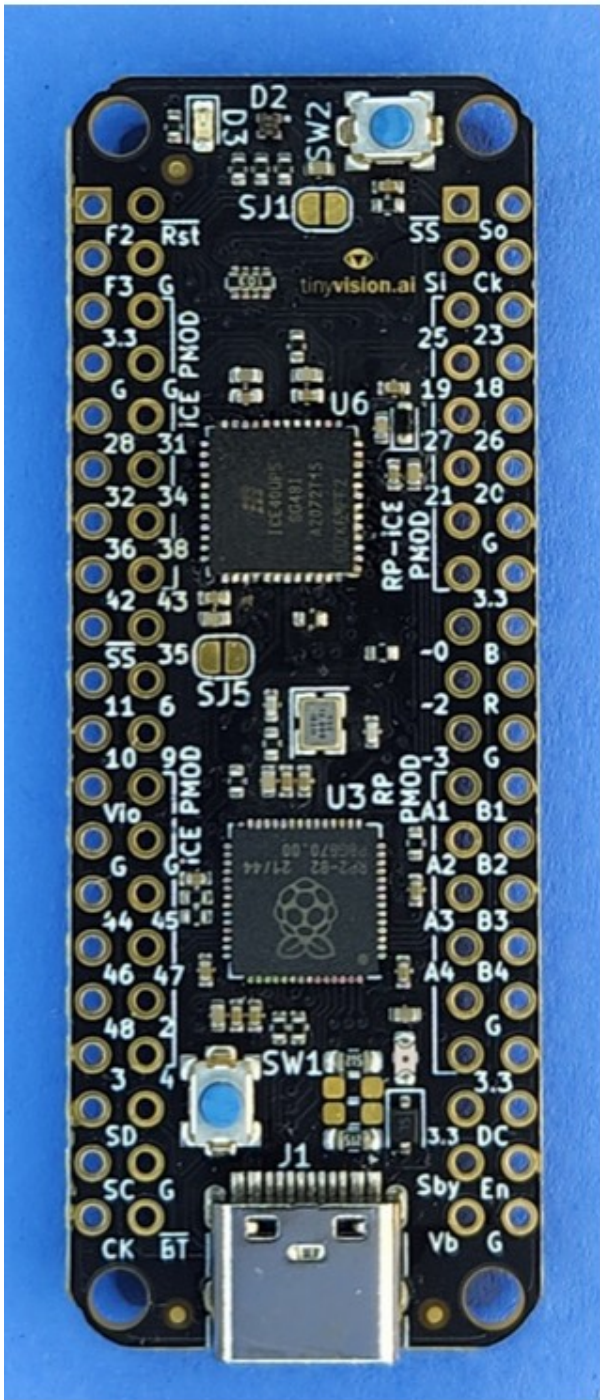


pico-ice with Ethernet pmod devel@pi5-90:~/PipelineC/examples/artysrc/eth \$ sudo .loopback\_test  
Test passed!



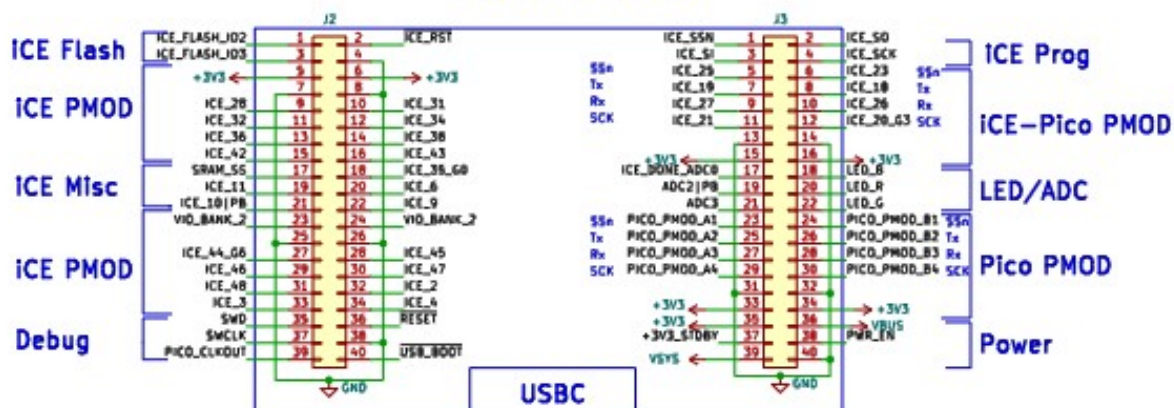
XX



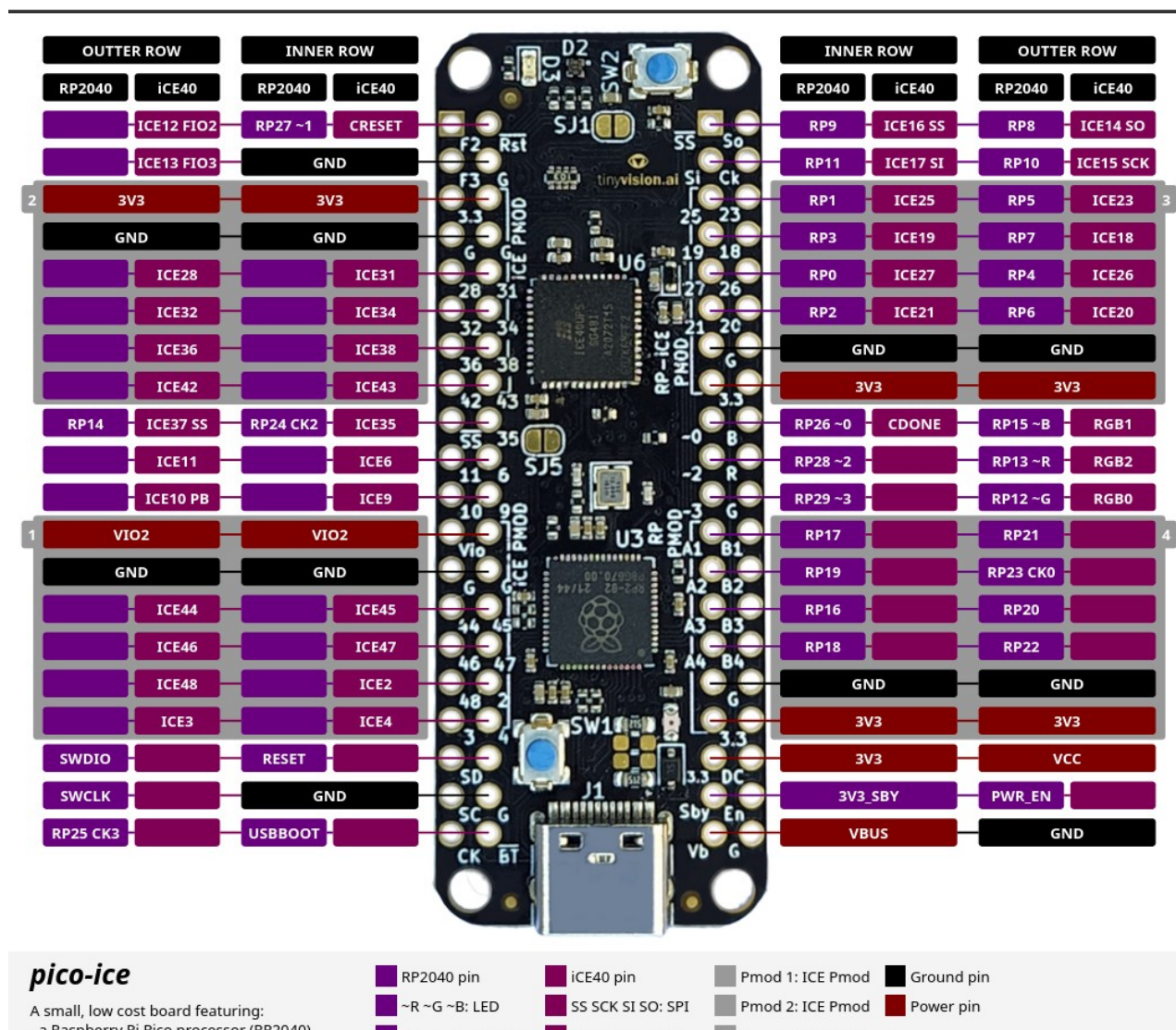




## Peripheral Headers



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### pico-ice

A small, low cost board featuring:

- a Raspberry Pi Pico processor (RP2040)

- RP2040 pin
- iCE40 pin
- Pmod 1: ICE Pmod
- Ground pin
- ~R ~G ~B: LED
- SS SCK SI SO: SPI
- Pmod 2: ICE Pmod
- Power pin

```
pi5-70 or pi5-80
devel@pi5-80:~/pico-ice/PipelineC/pmod-ethernet/ice_makefile_pipelinec $
devel@pi5-70:~/pico-ice/PipelineC/pmod-ethernet/ice_makefile_pipelinec $
make clean
make pipelinec TOP_NAME=ethernet_top
make gateway.bin TOP_NAME=ethernet_top
bin2uf2 -o gateway.uf2 gateway.bin
scp gateway.uf2 pi5-90:/media/devel/pico-ice/
devel@pi5-90:~/PipelineC/examples/arty/src/eth $ sudo ./loopback_test
Test passed!
```