

TTM4205: ChipWhisperer Lab Equipment List

Tjerand Silde and Caroline Sandsbråten

{tjerand.silde, caroline.sandsbraten}@ntnu.no

October 2025

1 Recommended Equipment

We recommend using the ChipWhisperer Husky throughout the entire lab. In lab 3 (RSA lab) another target board is required, namely the XMEGA target board. These can be found in the Crypto lab and are in boxes similar to the ChipWhisperer Nanoboxes, but marked “XMEGA Target Board”. We also have the STM32F4 target boards available in the lab room should you wish to use a different target board than the SAM4S target board included with the ChipWhisperer Husky. Note that this requires you to use the “STM32 Programmer” instead of the “SAM4S Programmer” when flashing the target board.

Both the XMEGA and STM32F4 target boards require you to use a CW312-CW308 adapter. These can also be found in the Crypto lab.

Lab 1 (SCA lab) and lab 2 (Fault lab) can be done using the ChipWhisperer Nano, but this setup is not well tested.

2 ChipWhisperer Husky Box Contents

Each ChipWhisperer Husky box contains the following:

- ChipWhisperer Husky
- SAM4S Target Board
- CW312T-ICE40 Target Board
- USB-C Cable

- CW313 Adapter Board with supporting circuitry for the CW312 target boards
- USB-C to USB-A adapter
- 20-pin IDC ribbon cable x2
- 12 inch SMA-SMA cable x2
- 6 inch BNC-MCX cable
- 6 inch SMA-MCX cable
- 20-pin breakout cable

Note that you will not have to use the BNC-MCX cable, the SMA-MCX cable, the 20-pin breakout cable or the CW313T-ICE40 target board in this lab. However, if you do choose to sample your own traces in lab 4 (ECC lab) then you need to use the breakout cables.

3 Reference Pictures

Below are reference images for the equipment you will be using in the lab.



Figure 1: ChipWhisperer Husky

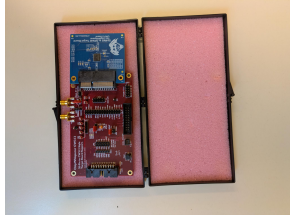


Figure 2: CW313 Adapter board and SAM4STarget Board

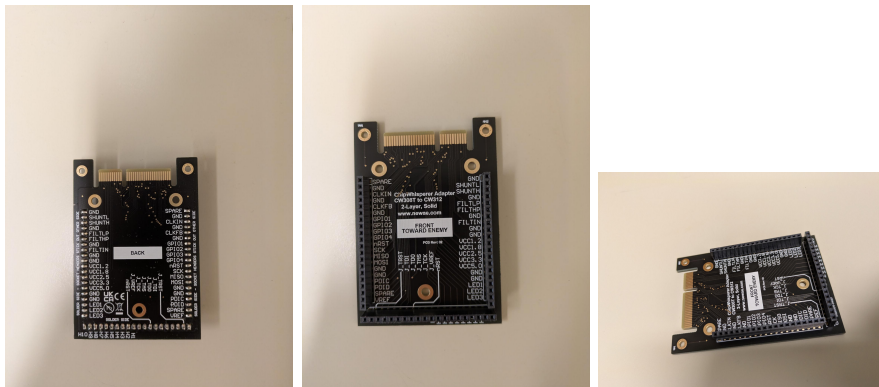


Figure 3: CW312 to CW308 Adapter Board



Figure 4: XMEGAtarget board and box.



Figure 5: STM32F4target board and box.



Figure 6: IDC ribbon cables.

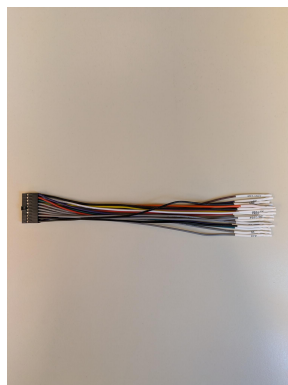


Figure 7: Breakout Cable

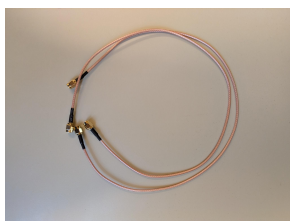


Figure 8: SMA-SMA cables.



Figure 9: USB-C cable with adapter.