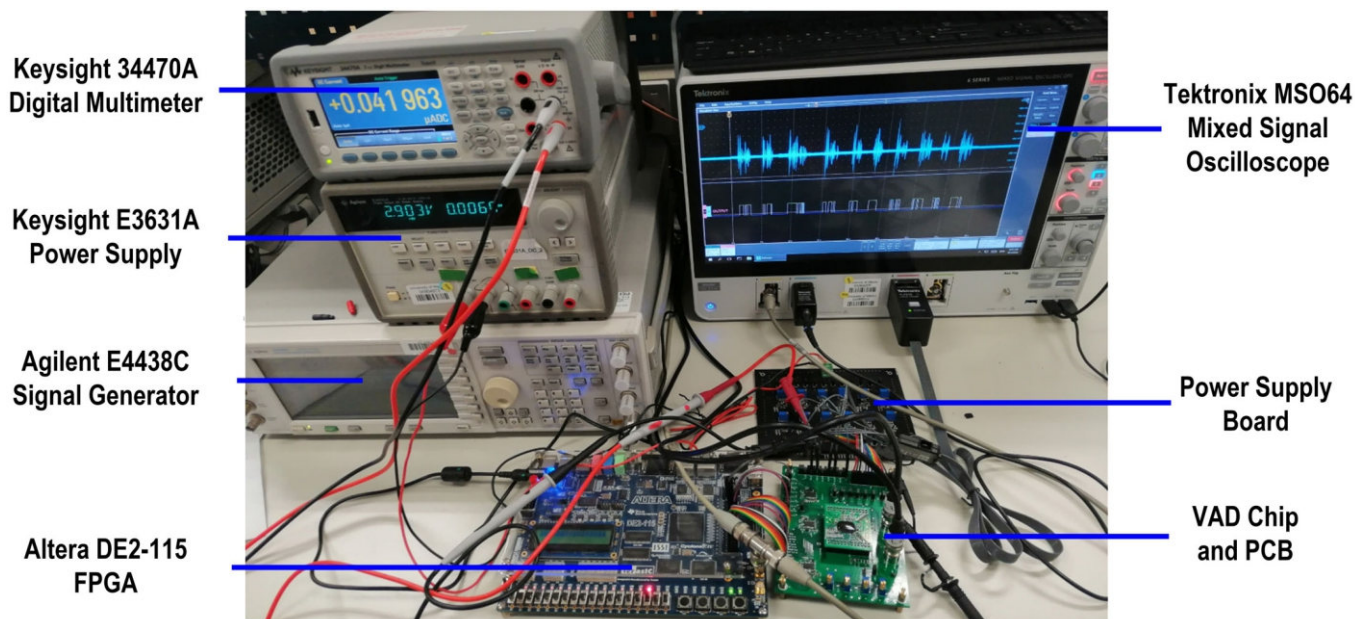
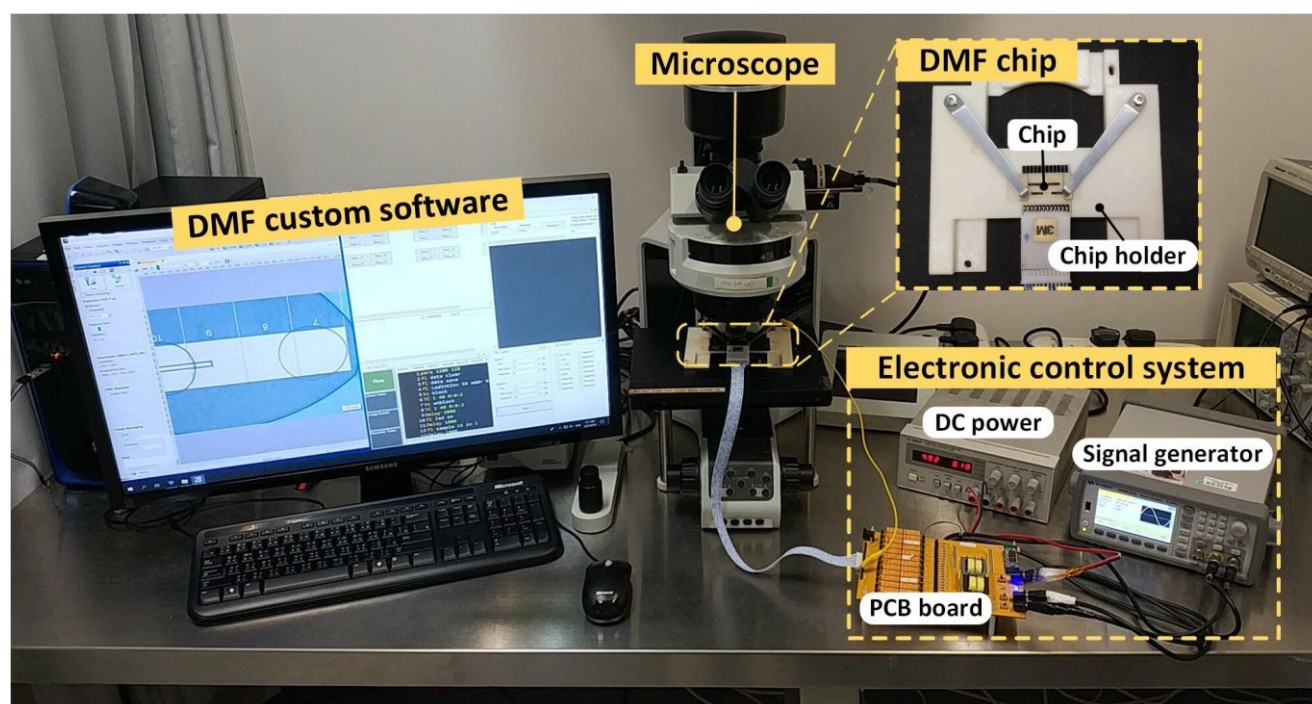


# EXPERIMENTAL PROTOTYPES

Experimental Setup of analog Voice Activity Detector (VAD).

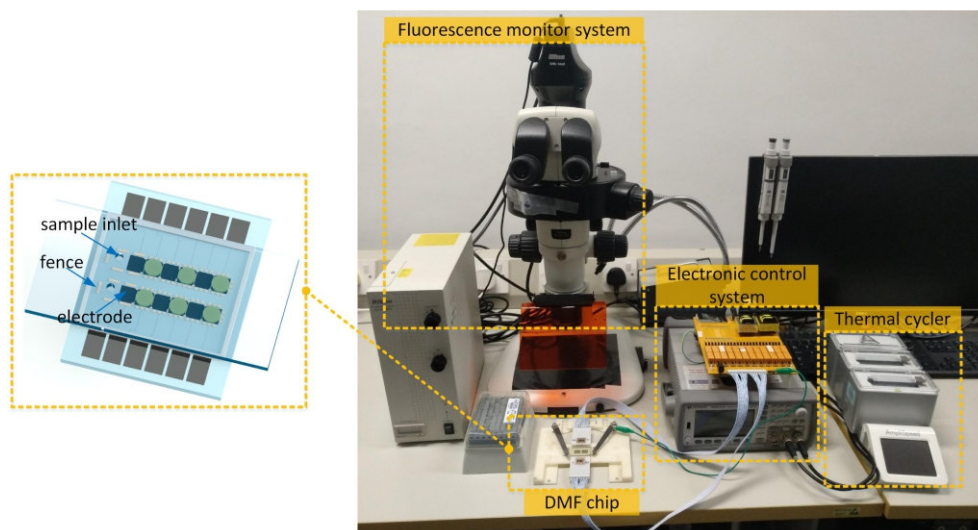


Satellite droplet ejection for sample delivery on DMF chip

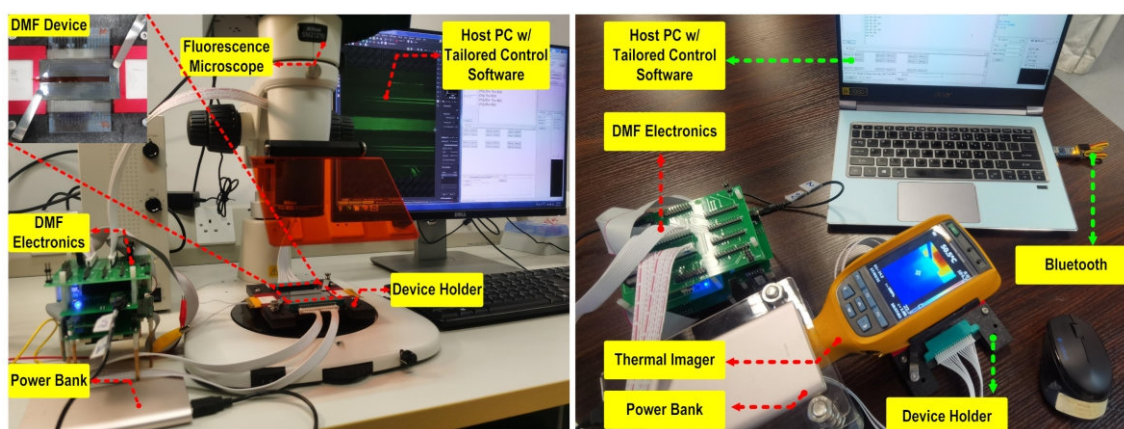


# EXPERIMENTAL PROTOTYPES

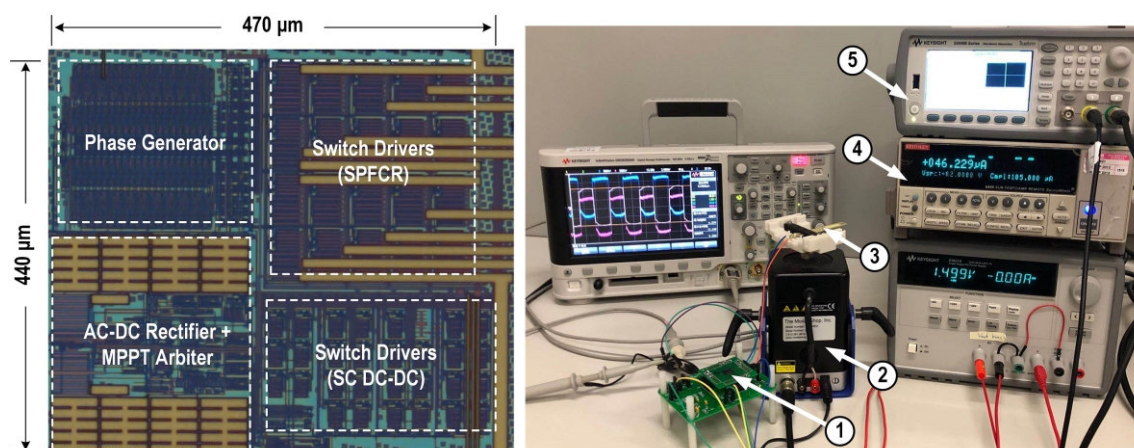
## Clip to Release on Amplification (CRoA) for enhanced PCR on DMF



## Experimental Setup for high-resolution MCA on DMF



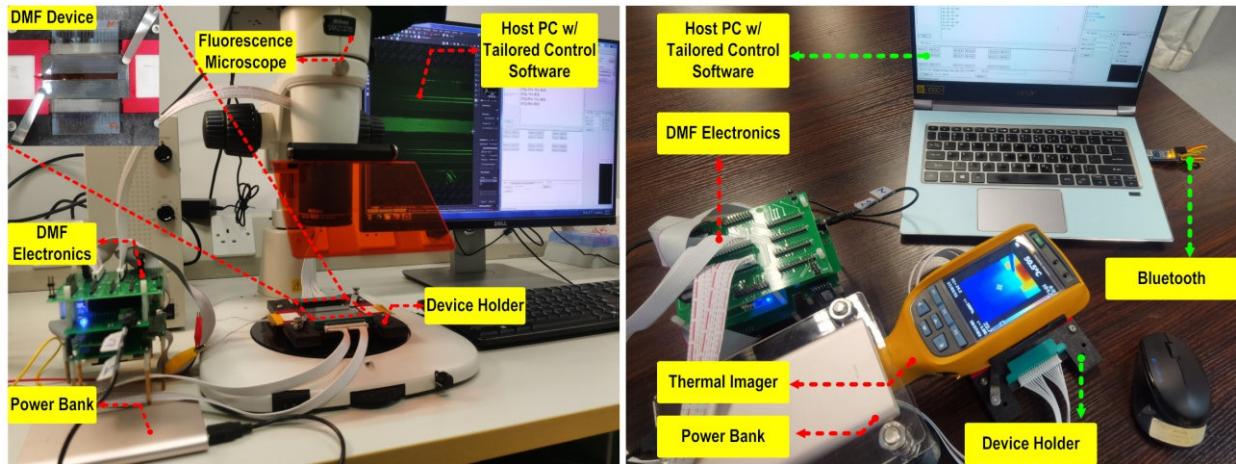
## Chip micrograph and experimental setup for piezoelectric energy harvesting using SPFCR





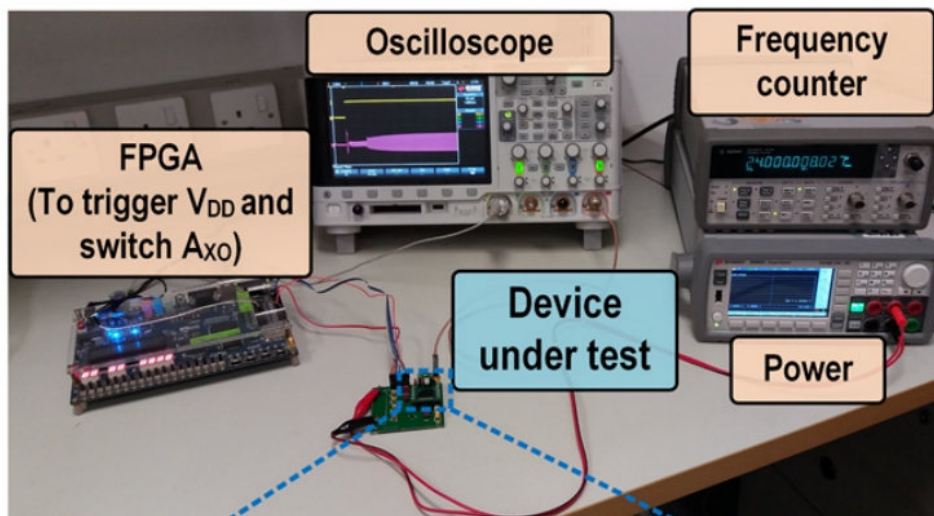
# EXPERIMENTAL PROTOTYPES

Experimental setup for high-resolution MCA on DMF

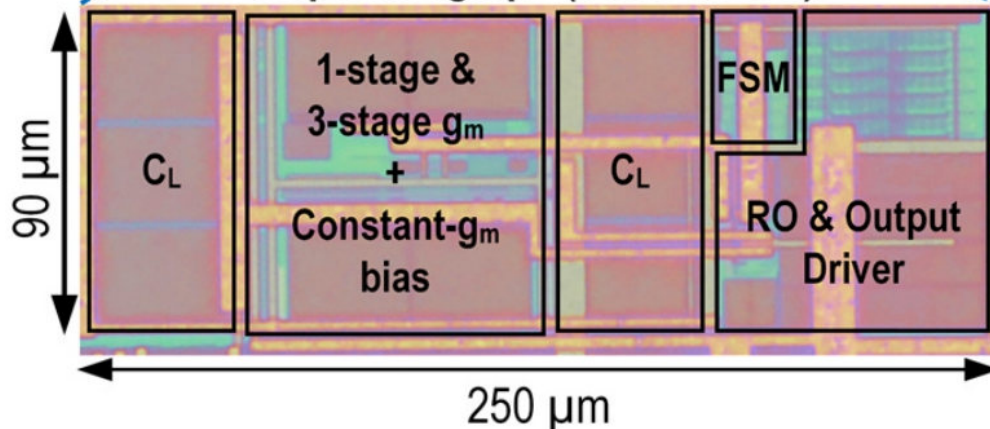


Experimental setup and die micrograph of the proposed fast startup crystal oscillator in 65nm CMOS

## Experimental setup

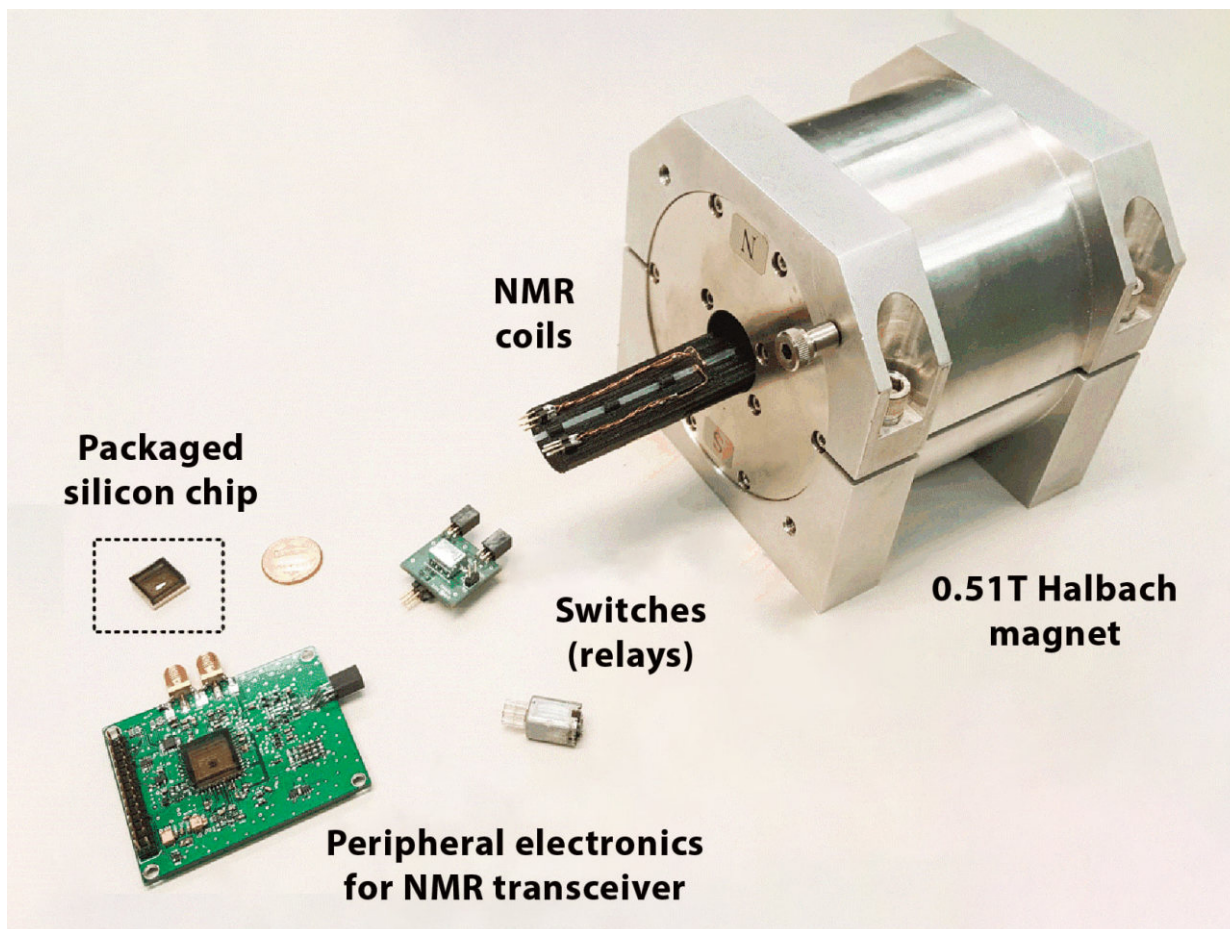


## Chip micrograph (65nm CMOS)

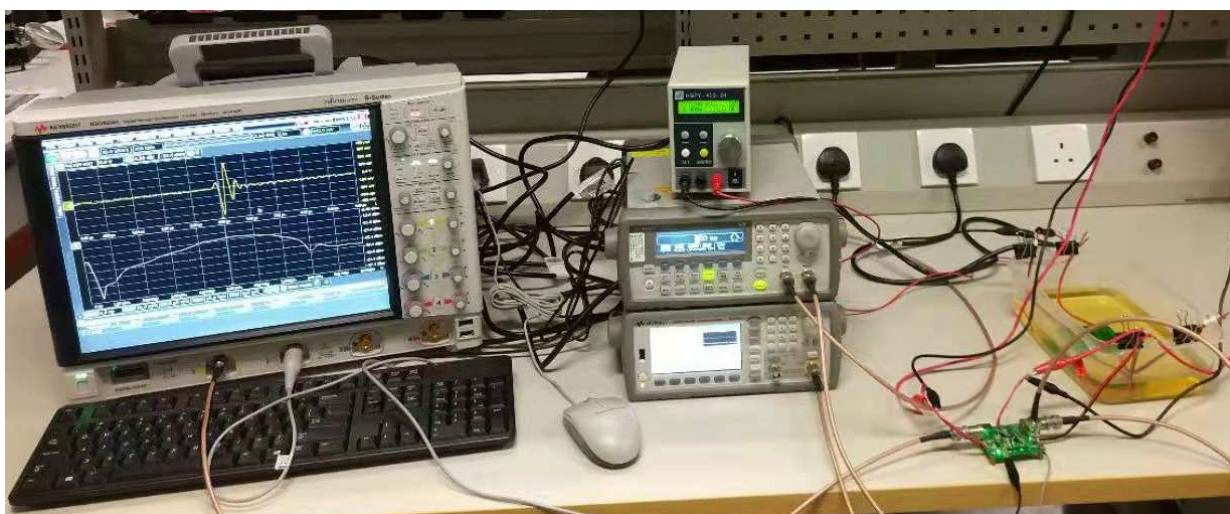


# EXPERIMENTAL PROTOTYPES

The hardware for the portable NMR platform with parallelism. The core of the platform is the CMOS NMR transceiver, which was packaged onto a chip carrier for testing.



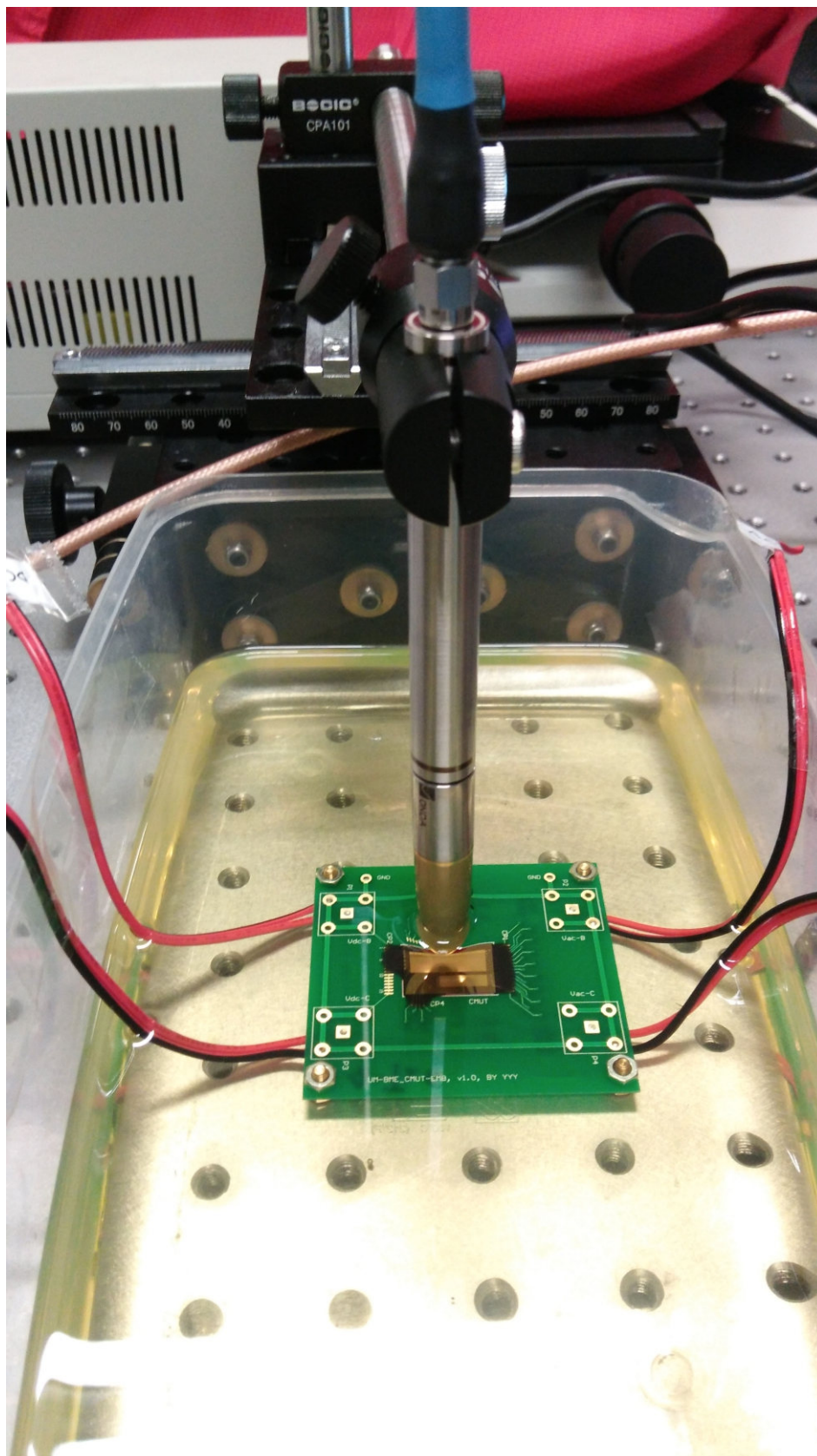
Experimental setup for testing the multi-band CMUT





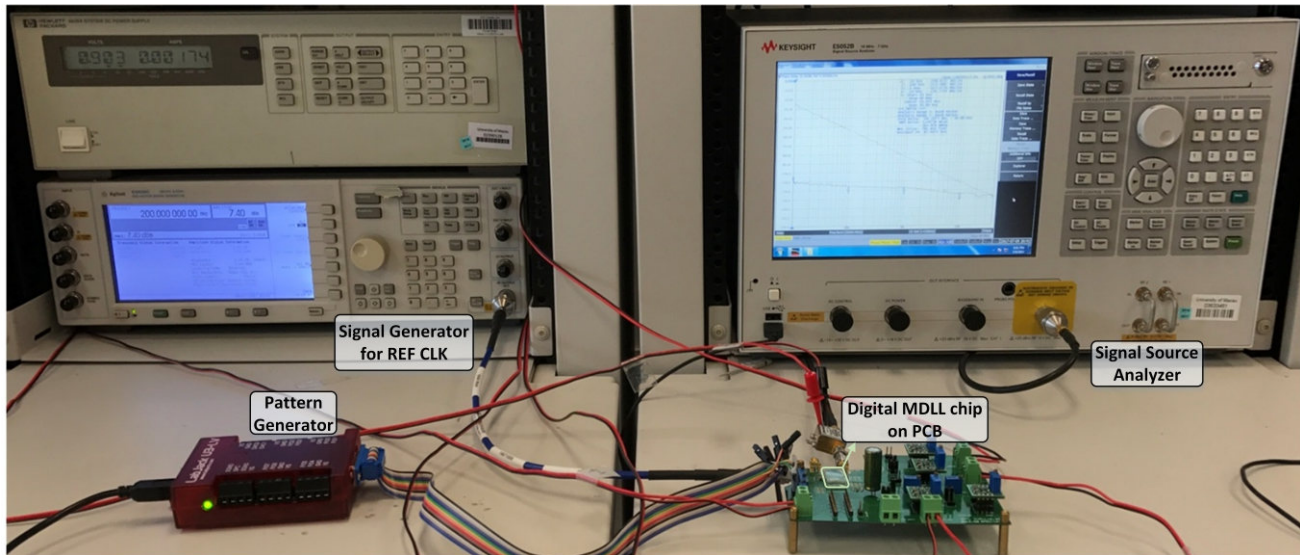
# EXPERIMENTAL PROTOTYPES

The acoustic performance measurement of the CMUT

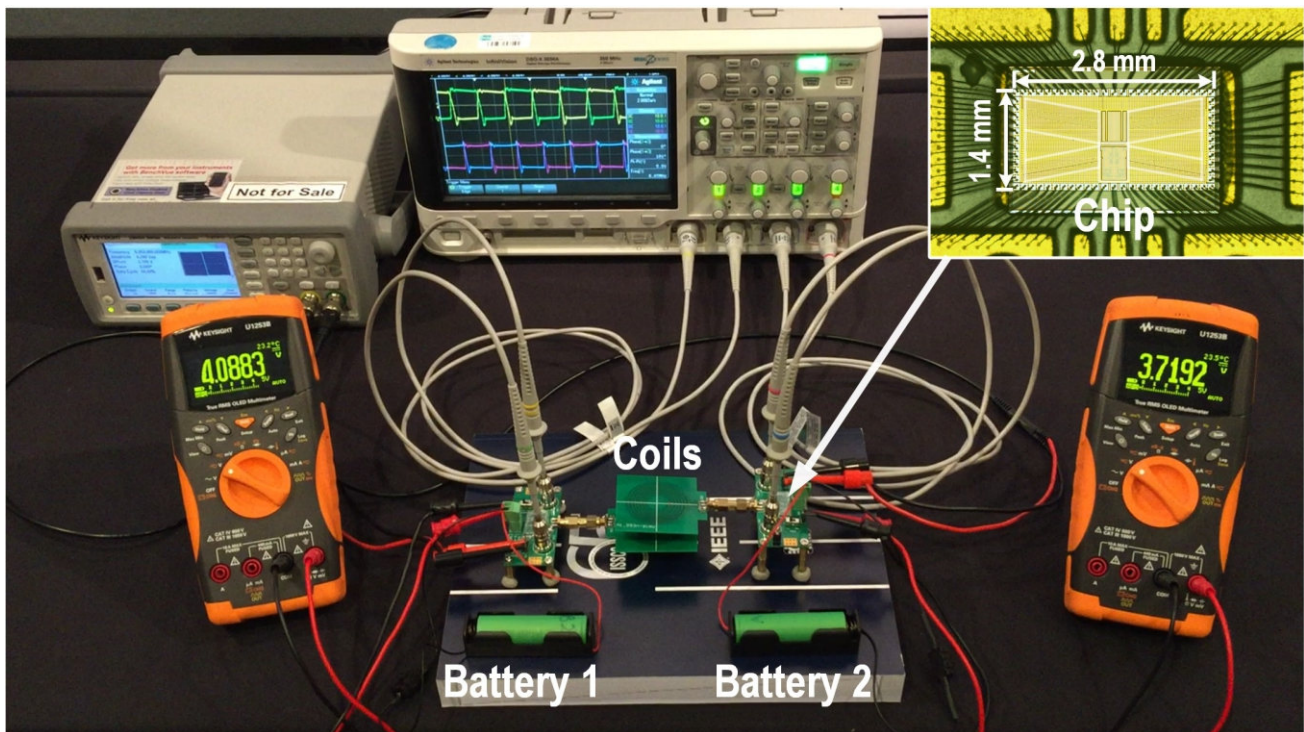


## EXPERIMENTAL PROTOTYPES

### Measurement setup of a low-jitter digital Multiplying Delay-Locked Loop (MDLL)



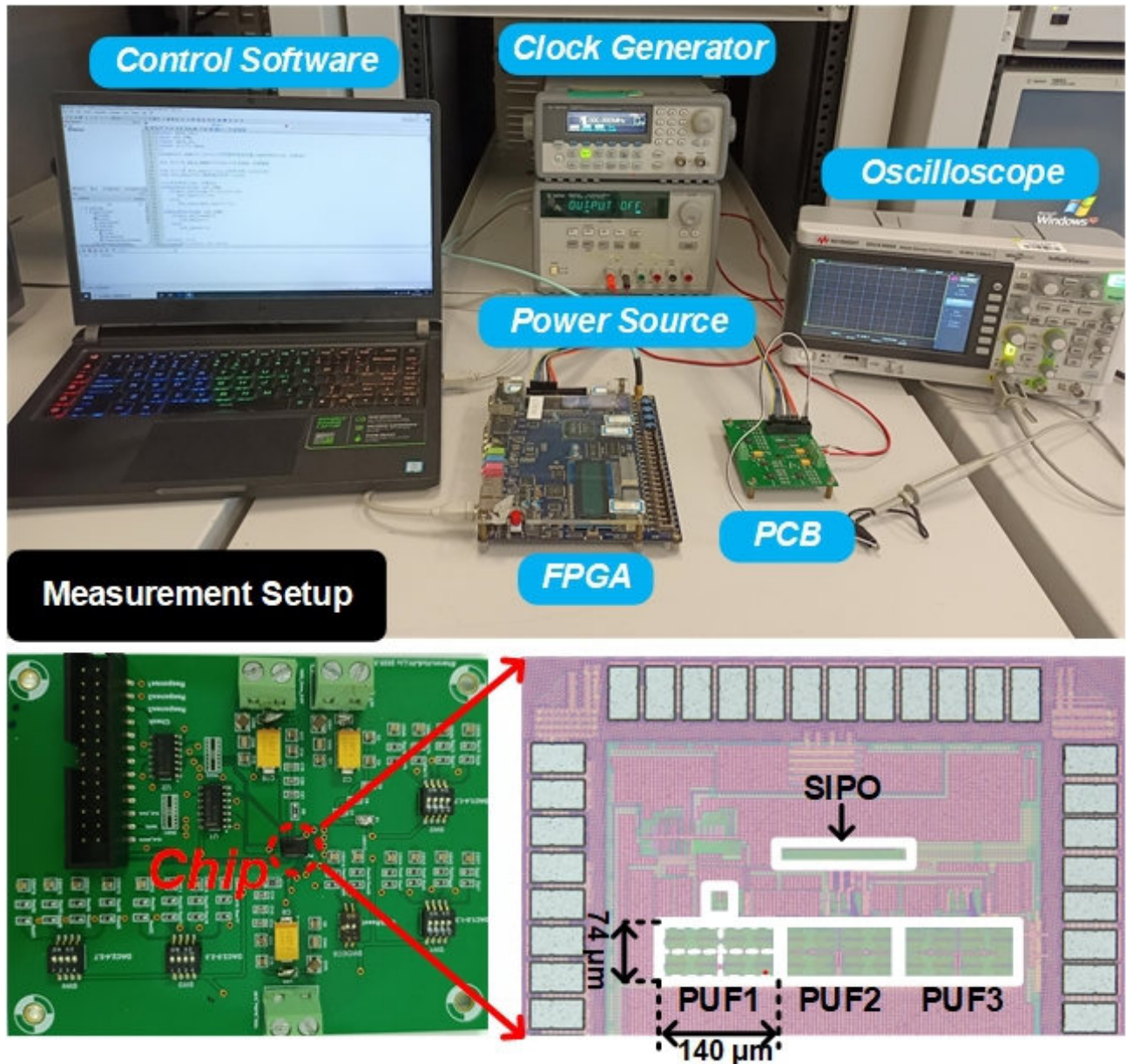
## Device-to-Device Bidirectional Wireless Power Transfer





# EXPERIMENTAL PROTOTYPES

Experimental setup of strong physical unclonable function, PCB design and chip photo

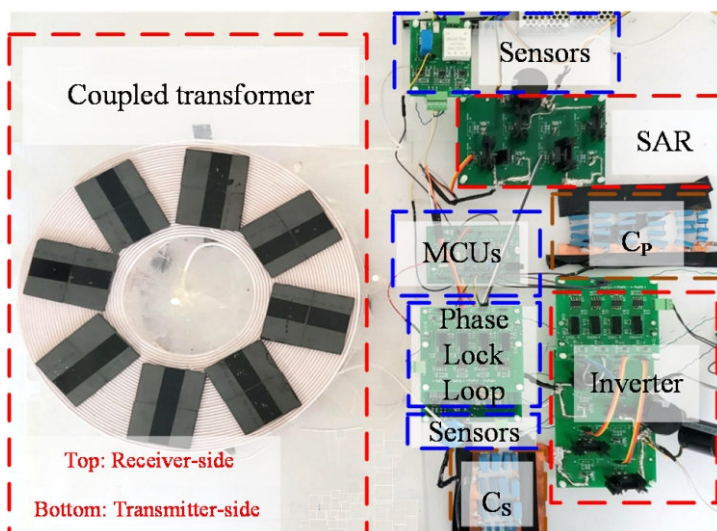
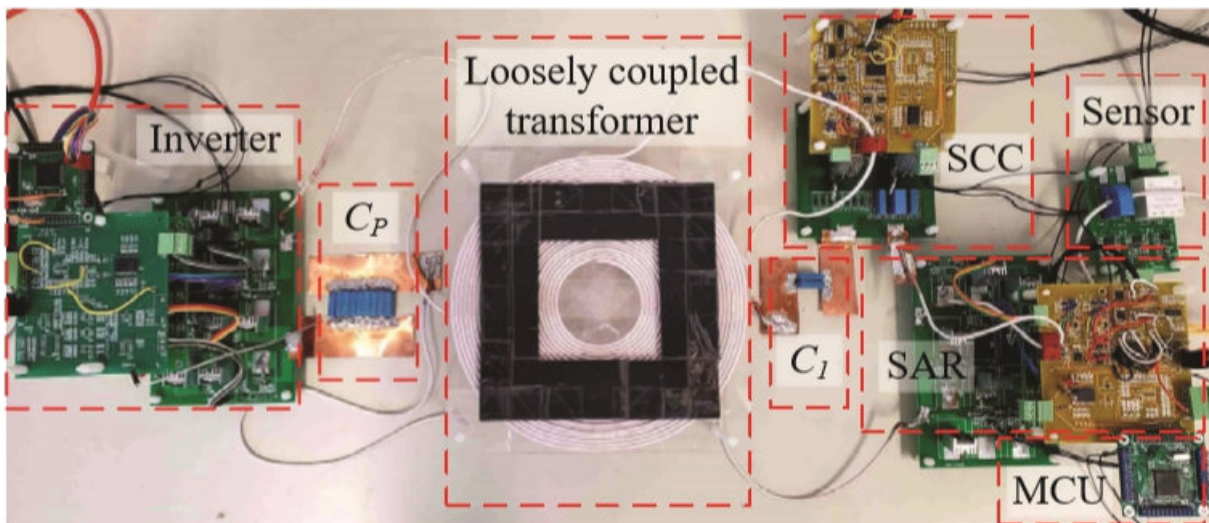


# EXPERIMENTAL PROTOTYPES

A High-Misalignment-Tolerance Inductive Power Transfer Charger Experimental Prototype for Mini-EV



A Single-Stage Constant-Power Inductive Power Transfer Converter Experimental Prototype

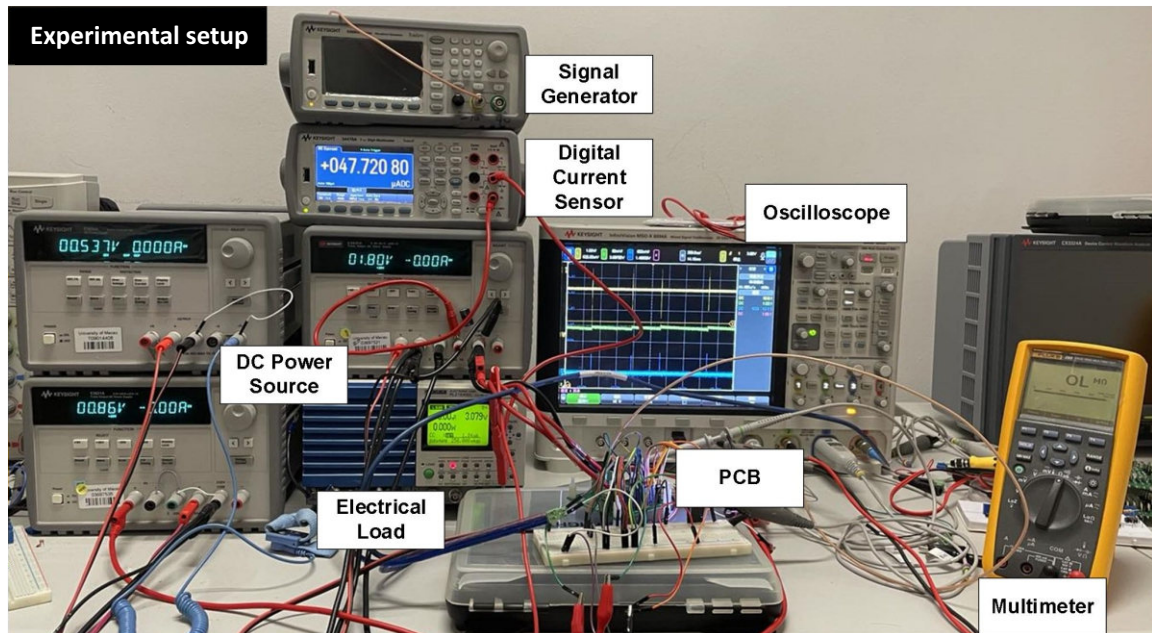


A Constant-Frequency and Non-Communication-Based Inductive Power Transfer Converter Experimental Prototype for Battery Charging

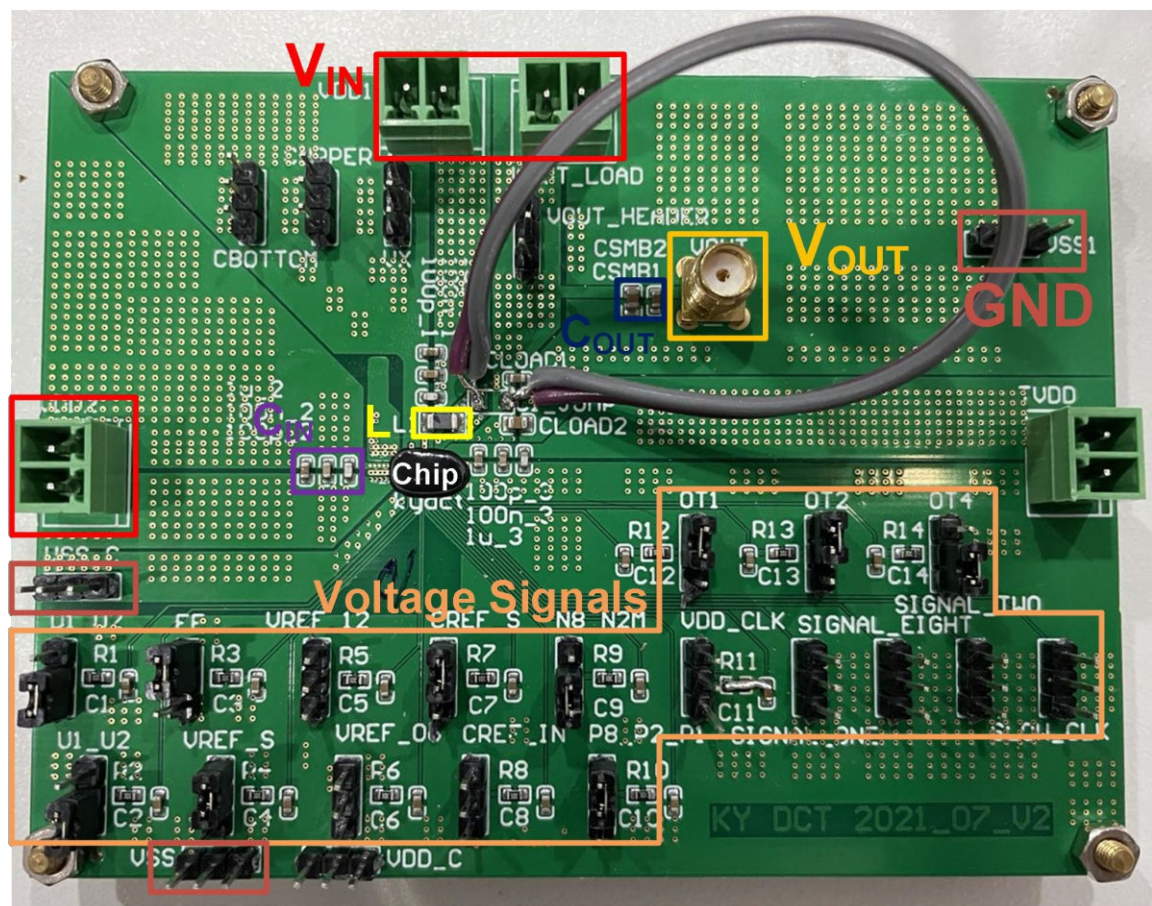


# EXPERIMENTAL PROTOTYPES

Experimental setup of an ultra low quiescent current DC-DC converter system.



Prototype test board for an ultra low quiescent current DC-DC converter.



# EXPERIMENTAL PROTOTYPES

Experimental setup for measuring the Bandgap Reference.

