

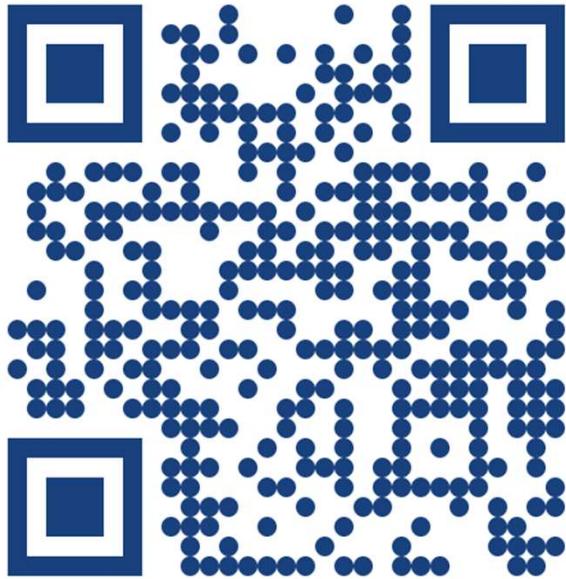
Microprobing with ICEBite

Solderless testing probes for everyone



IoTSecurity101.org

We are IoT Security 101, an open initiative in IoT security Community, known for our flagship IoT-PTv1 OS, curated content, and influential online groups; now expanding our mission through research and conference workshops and villages & new knowledge-sharing initiatives



Core Team



Mr-IoT (Founder)

I am that guy.

[LinkedIn](#)



CJHackerz (Chirag Jariwala)

Security Researcher

[LinkedIn](#)



Kartheek Lade

Automotive Security Researcher

[LinkedIn](#)



Mohammad saqeeb shariff

Hardware Security Researcher.

[LinkedIn](#)



Saurabh

Cloud and IoT Security Researcher.

[LinkedIn](#)



Karthik

Soldering, Lockpicking expert & PCB analyst.

[LinkedIn](#)



Jose

IoT Security Researcher.

[Twitter](#)

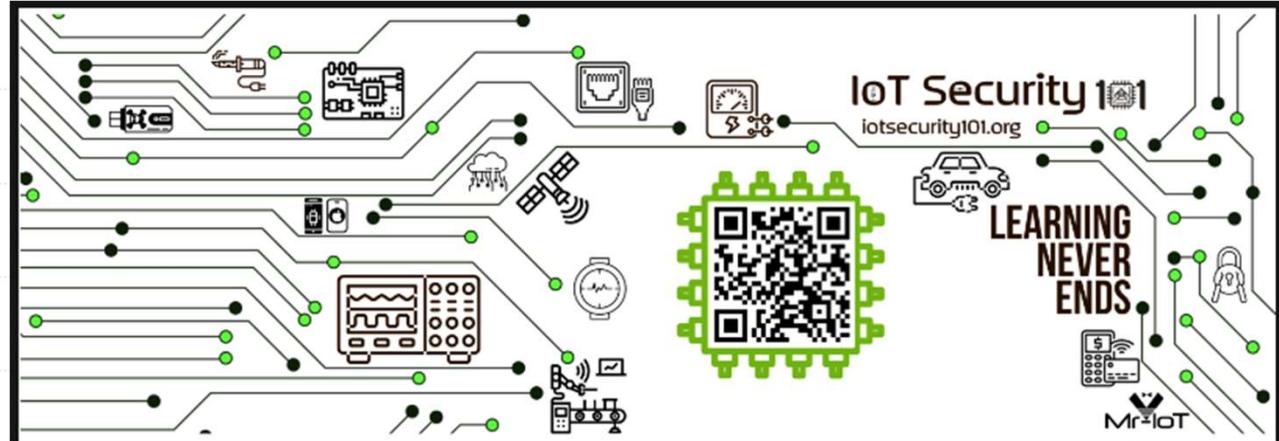


Matt Brown

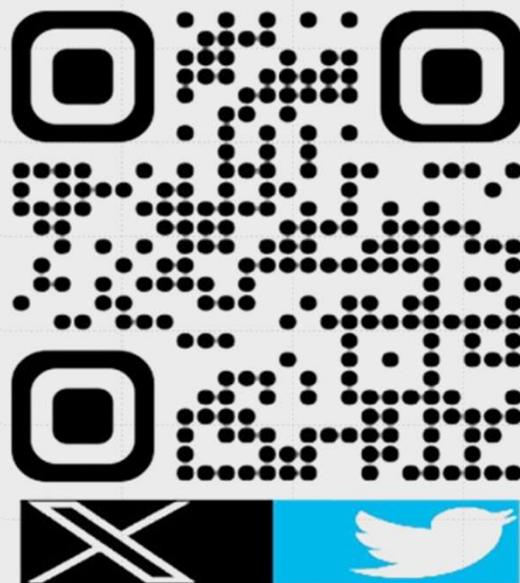
IoT and Hardware Security Researcher.

[LinkedIn](#)

About Me...!



- Lead QE Engineer at Crestron Software Development India Pvt Ltd.
- Soldering, PCB analyst and Lock picking expert.
- Core team member of **IoTSecurity101**



Agenda..

- Why Solderless testing probes
- How Icebite started in India
- Other similar products
- Detailed explanation
- Use cases
- Demo
- Conclusion

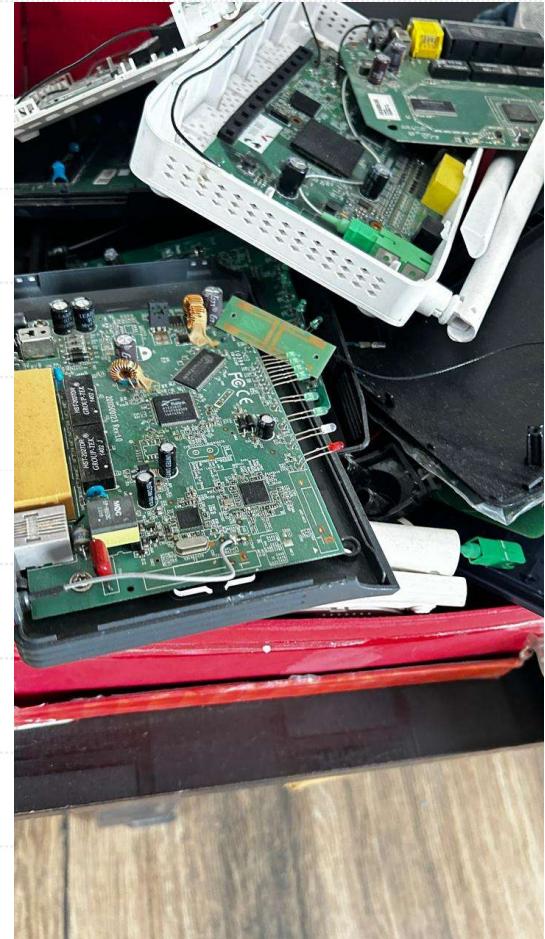
Why solderless probes..?

- Reduce Impact wrong soldering like heat control and pin dis-location etc
- If you are beginner zero worries on soldering
- Loss of data signals controlled
- Easy to use like Plug "n" Play



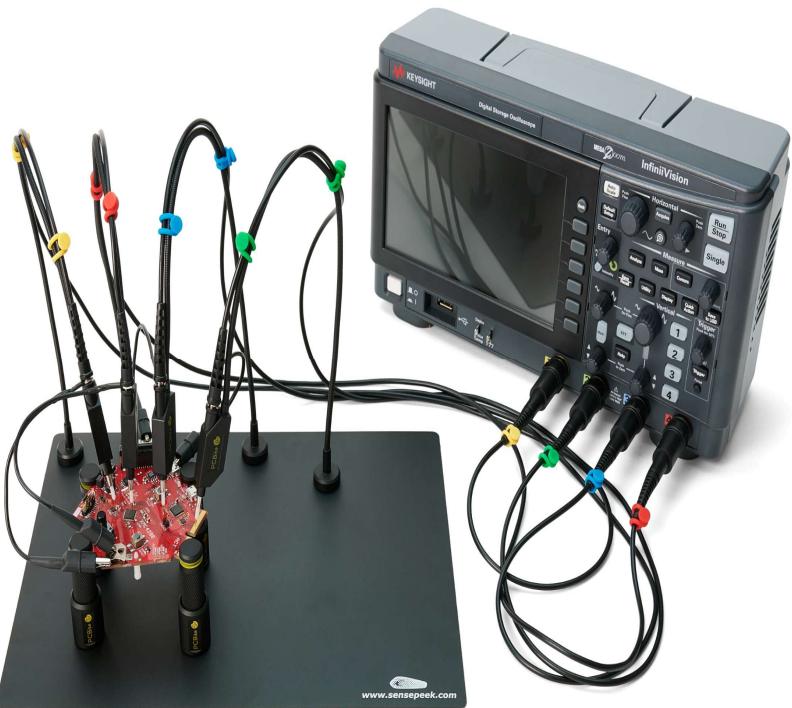
How icebite started in india

- Kind of our team messed up many thing's teardowns and soldering and pads got damaged
- We have tested some expensive gadgets like bitcoin wallets single units so difficult to solder them
- Based on the above experiences we decided start in INDIA making instead importing , customs charges increased
- Ofcourse we have taken inspiration from pcbite and pizzabite



Other similar products

- PCBite by sensepeek



PCBite kit with 4x SP10 probes and test wires
€119

The first truly handsfree probe! Makes instant measurements or long triggering sessions a breeze.

No more soldering wires to connect your probe or complicated tools to setup, just positioning the probe needle on any test point or component in the signal path and release.

Other similar products

- Pizzabite by whid team

J@LC JLCPCB

Why JLCPCB? Capabilities Support Resources

Home / Order History

Order History

All

PCB/PCBA/Stencil

3D/CNC

Mechatronic Parts

File Manager

Parts Manager

Payments

Account Setting

Messages

PCB Prototype
Order #: Y19-
Build Time: 3-4 days
30 pcs €7.29
[Product Details](#)

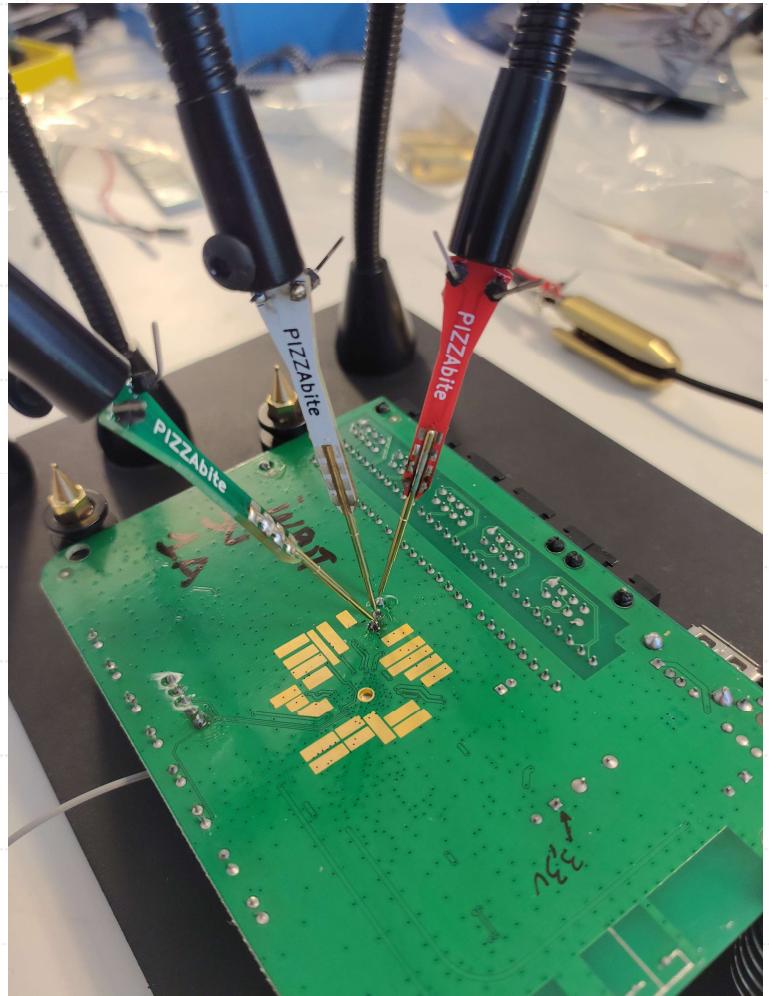
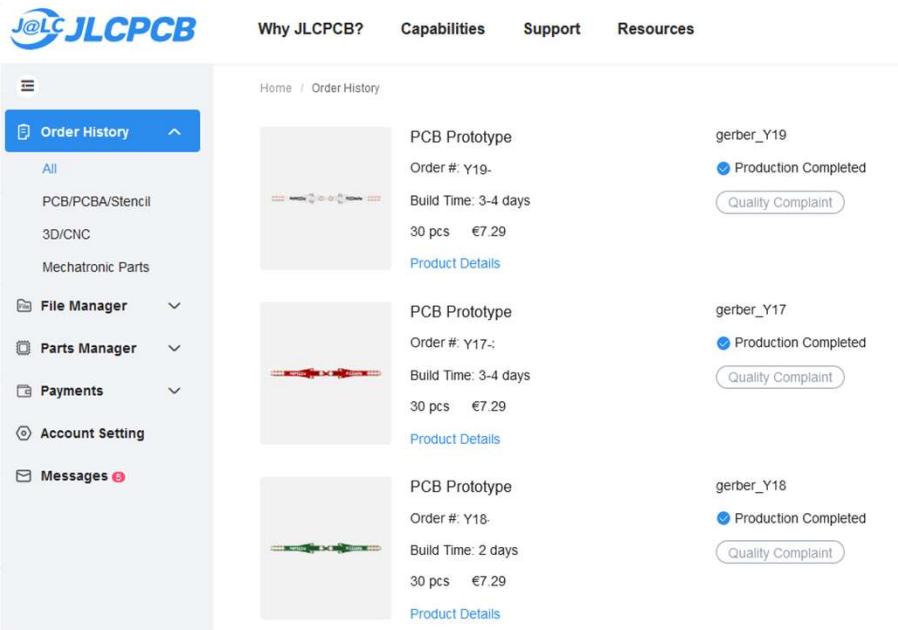
gerber_Y19
Production Completed
[Quality Complaint](#)

PCB Prototype
Order #: Y17-
Build Time: 3-4 days
30 pcs €7.29
[Product Details](#)

gerber_Y17
Production Completed
[Quality Complaint](#)

PCB Prototype
Order #: Y18-
Build Time: 2 days
30 pcs €7.29
[Product Details](#)

gerber_Y18
Production Completed
[Quality Complaint](#)

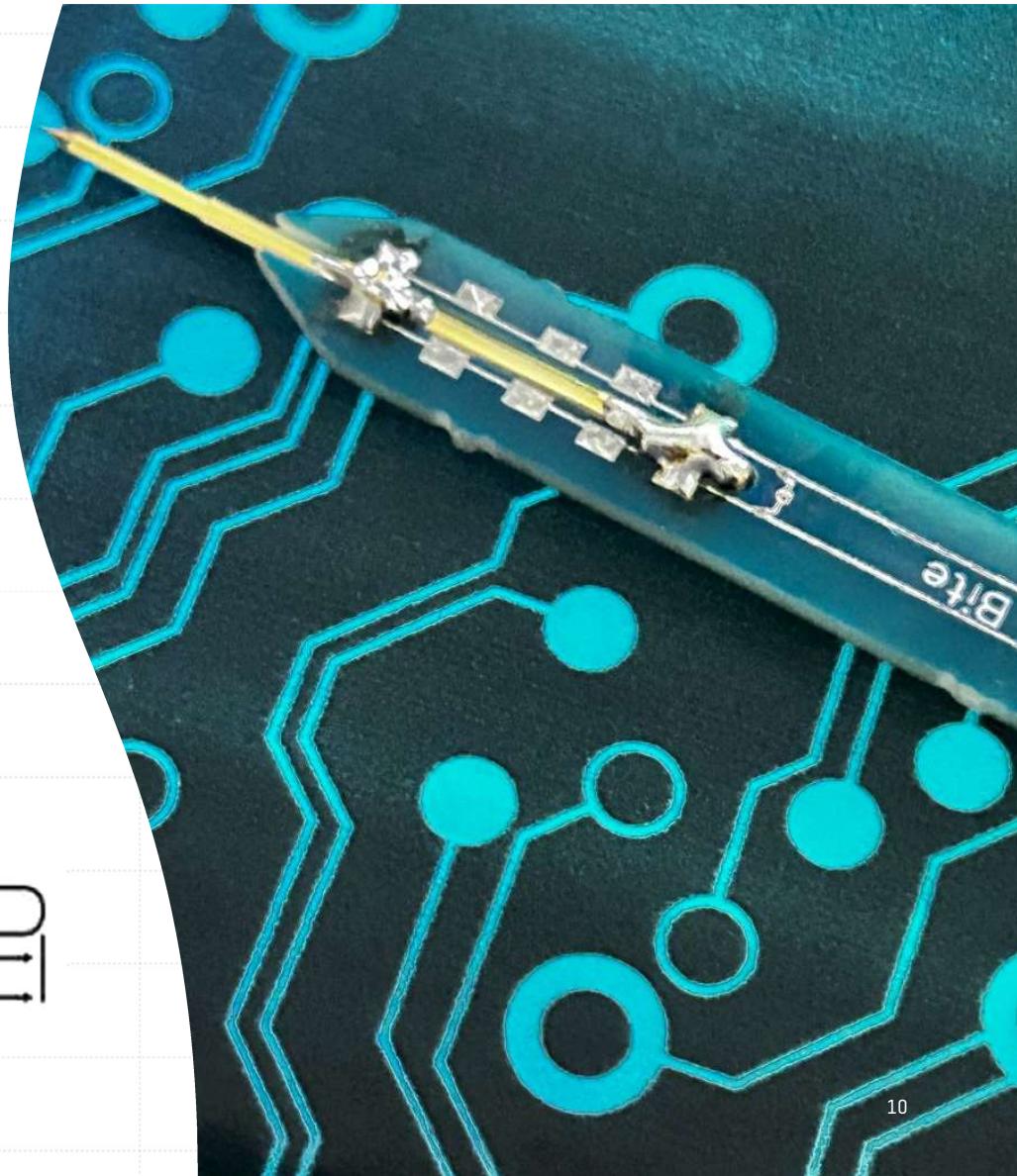


Detailed explanation

- Icebite includes following
 - Spring Pogopins with dia 1.36 or 1.38 mm we can use
 - PCB design
 - Soldering Flexible or helping hands
 - Target PCB holder for stability
 - Good base for icebite holder with crocodile clamps

Pogo pins

- Spring Pogopins with dia 1.36 or 1.38 mm we can use



Specifications

Recommend Min. Centre	: 2.54mm (100mil)
Full Travel	: 6.3mm
Spring Pressure	: 250g ($\pm 20\%$)
Current Rating	: 3A, Continuous
Contact Resistance	: 50m Ω
Mounting Hole Size	: 1.75mm

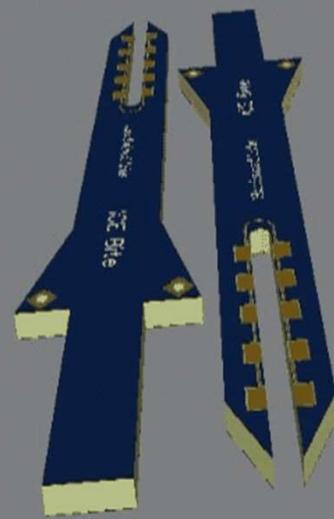
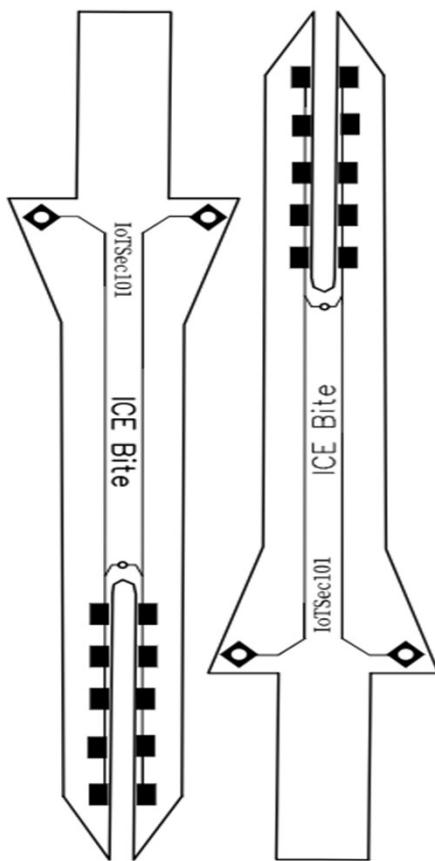
Material

Plunger	: Full-hard Beryllium Copper, Gold-plated over nickel
Barrel	: Brass, Gold-Plated
Spring	: Stainless Steel
Receptacle	: Brass, Gold-Plated

Diagram



PCB Design:



Soldering Flexible or helping hands:

Rupees : 18,191 INR

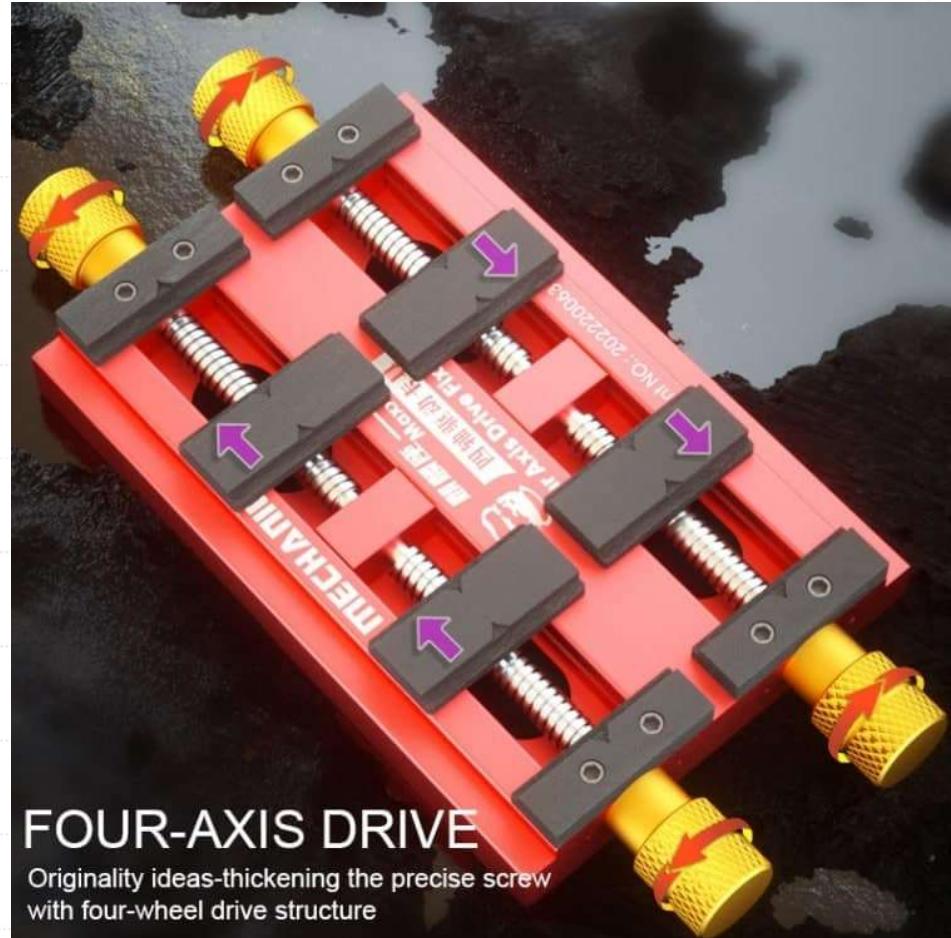


Soldering
Flexible or
helping hands:

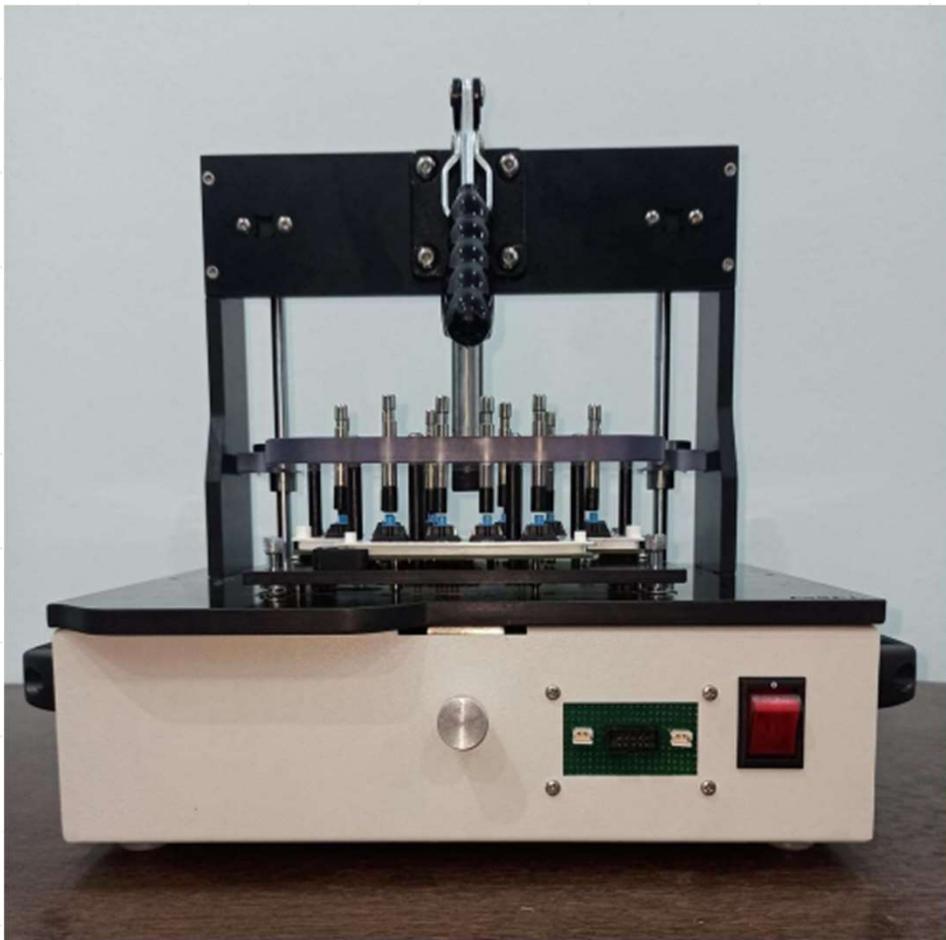


We choose this for
1400Rs

PCB Holder:



PCB Holder:



Use cases:

- Fixture Design & Manufacturing:
 - Manual Testing Fixture (Toggle Mechanism)
 - Pneumatic Testing Fixture (Cylinder Mechanism)
 - Cam-operated test fixtures for RF, circuit, and jacking, as well as automation solutions.
 - This can be used in produce various sorts of standard test setups, such as Customized design and furniture accessories.

Use cases:

Avoid soldering on sensitive chips

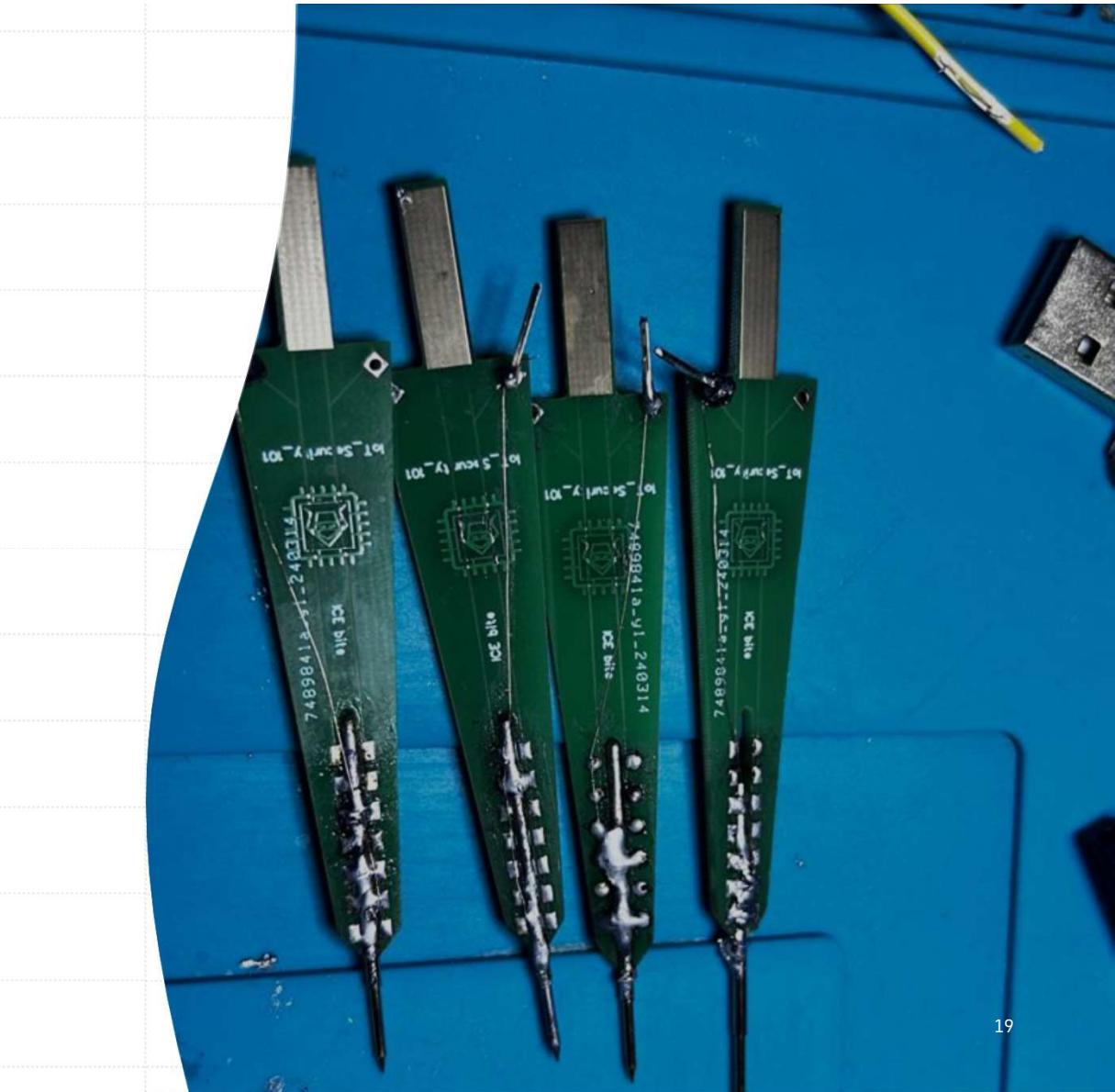
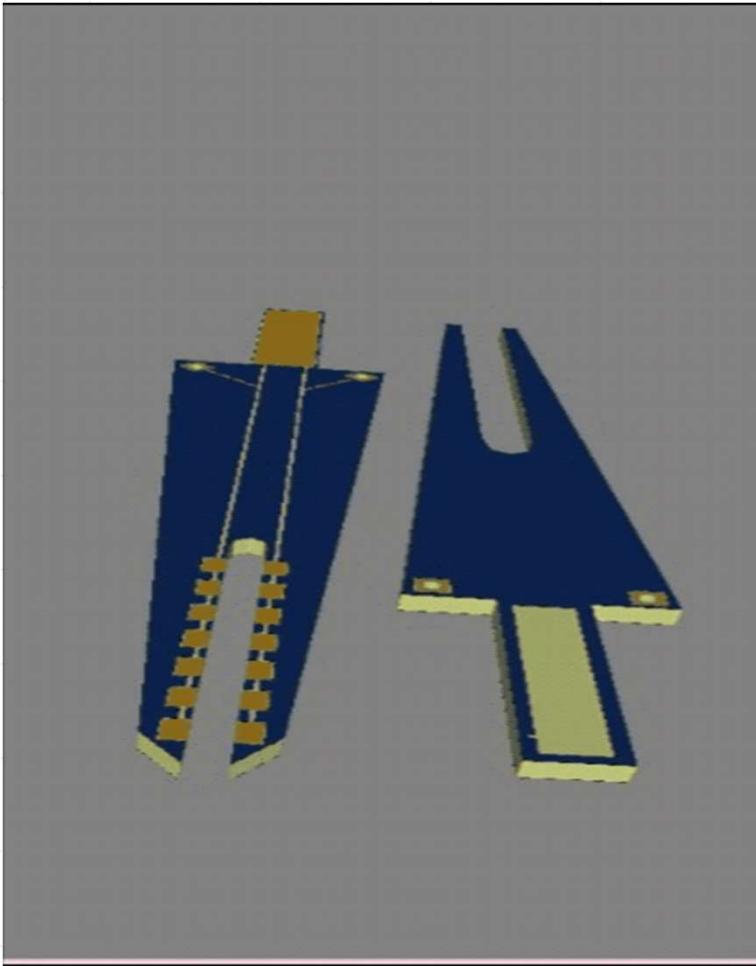
Probing UART pins without tampering and damaging PCAB

Probing JTAG Pins

Retaining the device in its original shape.

Avoid soldering issues **Cold joins, Solder bridging, Excess soldering, Insufficient soldering , In-correct soldering temperature.**

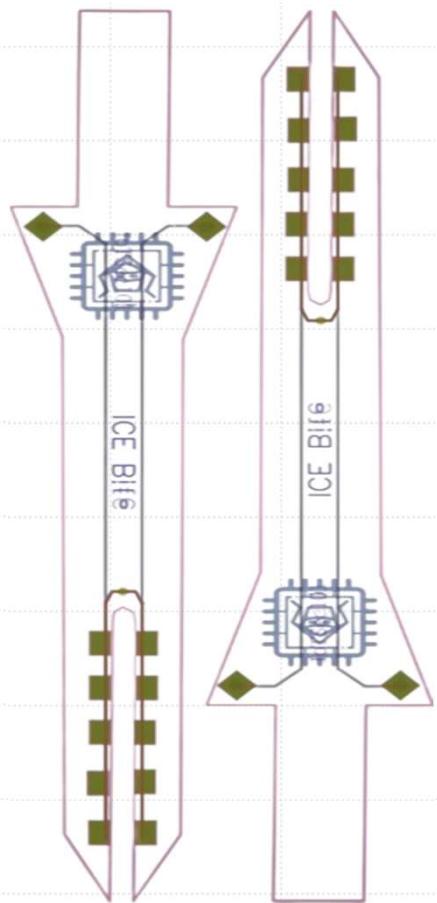
Alpha version



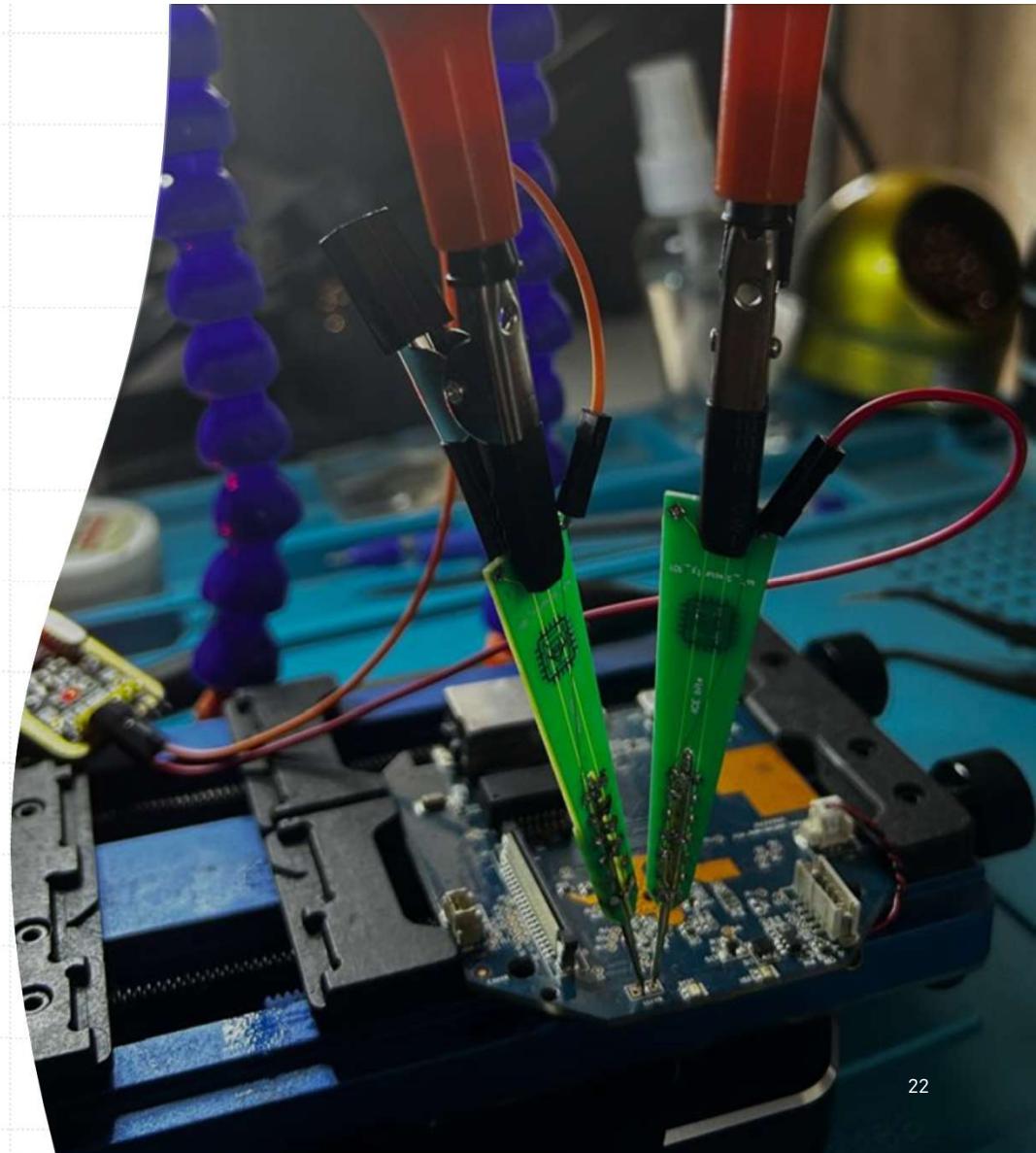
1st model bulk



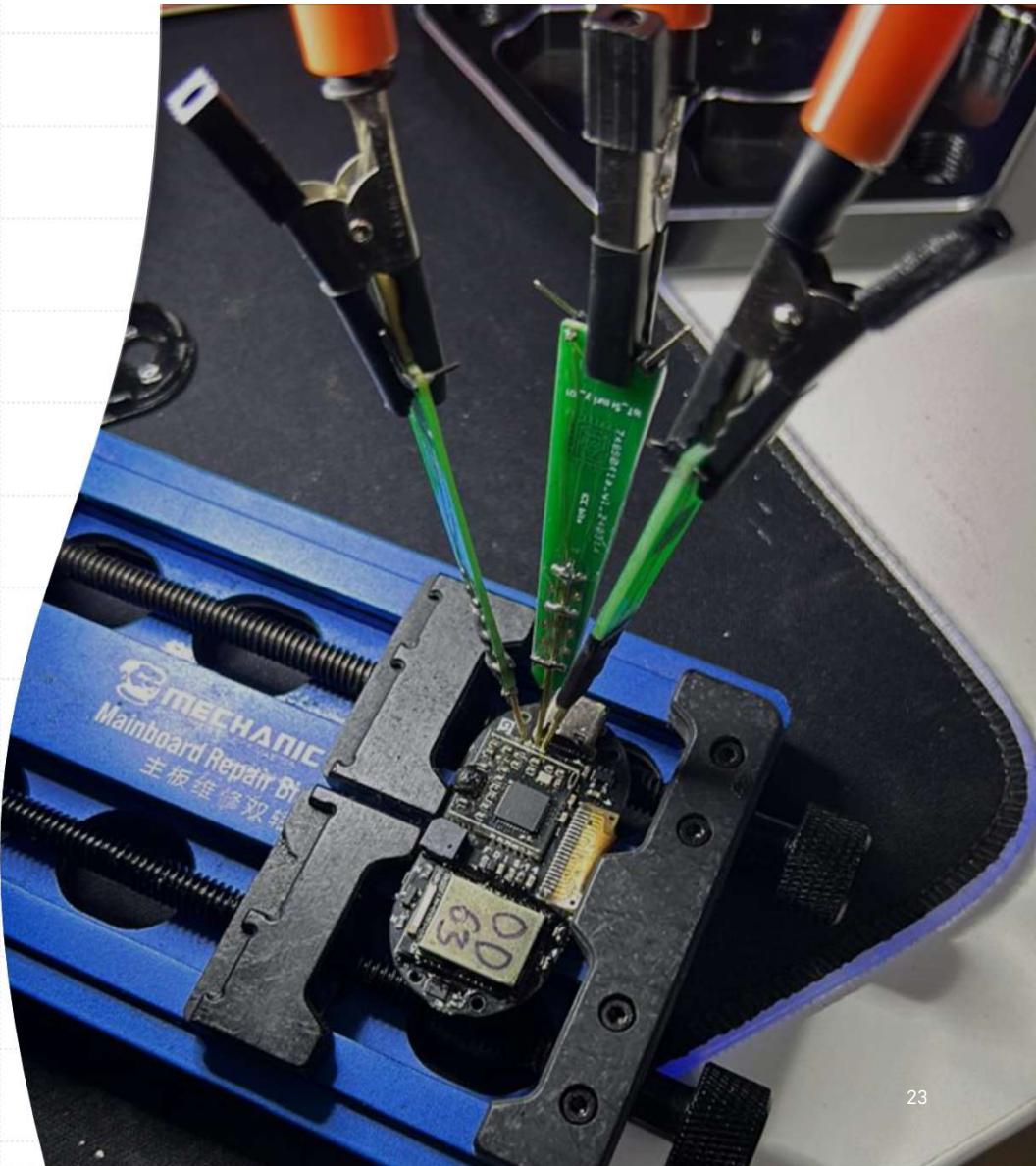
Final Design:



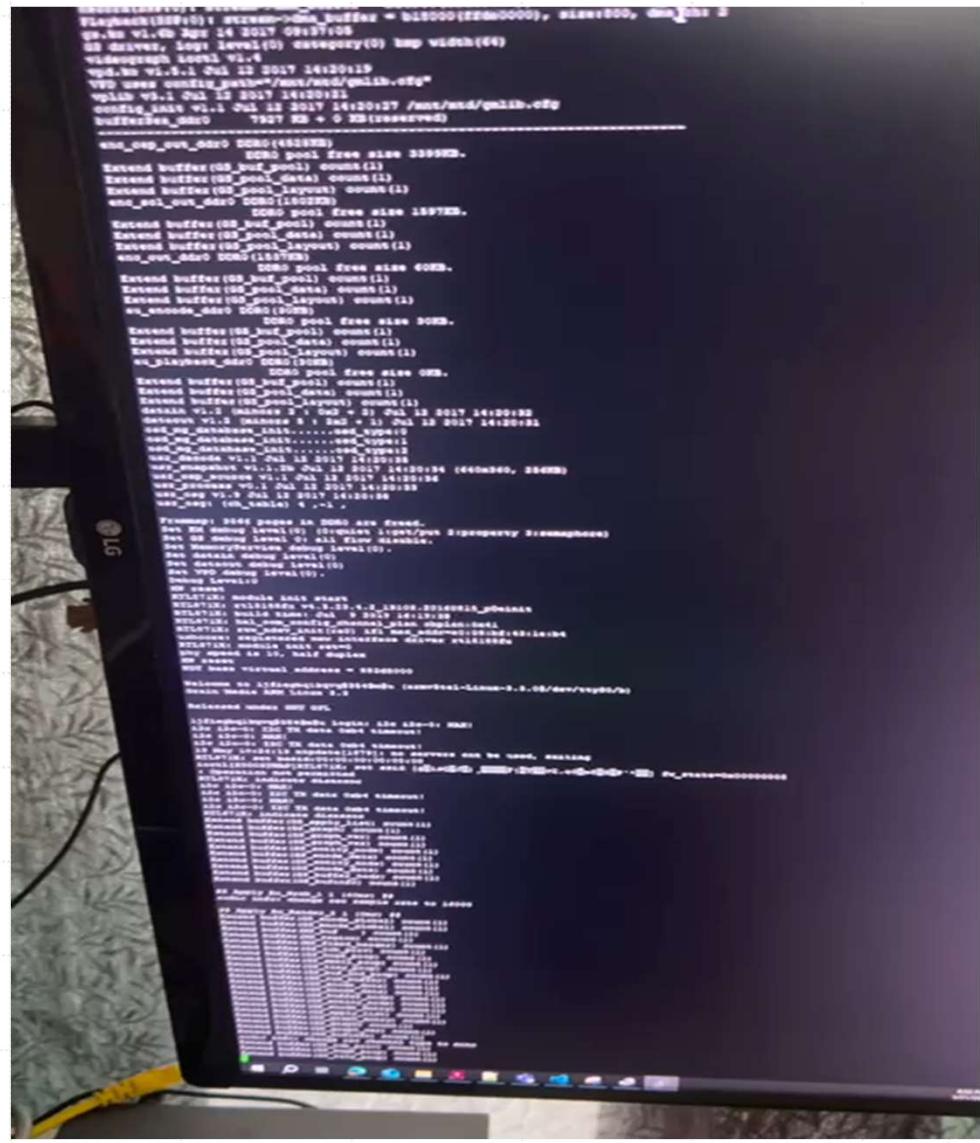
IP Camera .. Pins



Bitcoin Wallet



Demo



Conclusion:

Easy To use to Probe pin
for HW Pen testing

Game changer on handling
the device.

ICEBite going to be open
product design anybody
can print it