SOLDERING

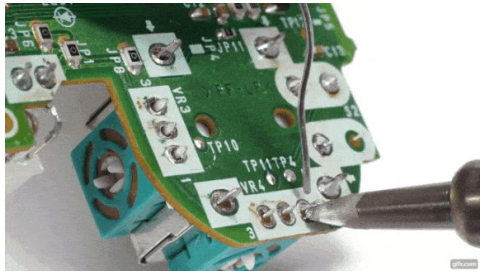
A step towards becoming the Ironman

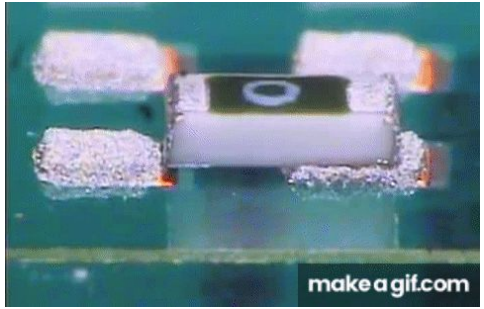
SOLDERING

ALLOY WITH LOW MELTING POINT

TIN +LEAD
&
LEAD FREE

- WIRE
- PASTE





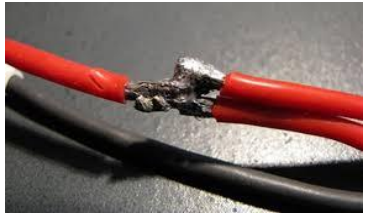
Why solder

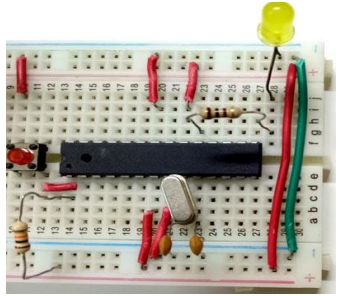
reliable

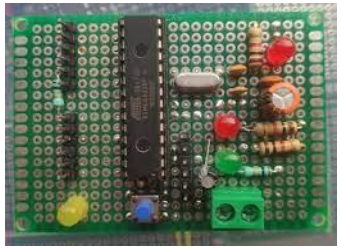
scalability

miniaturize

PROGRESS →







SECURED →

Basic tools to know

SOLDERING STATION

TEMPERATURE CONTROLLABLE

Soldering wick

Wire stripper

A good solder wire

Solder flux

Rubbing alcohol

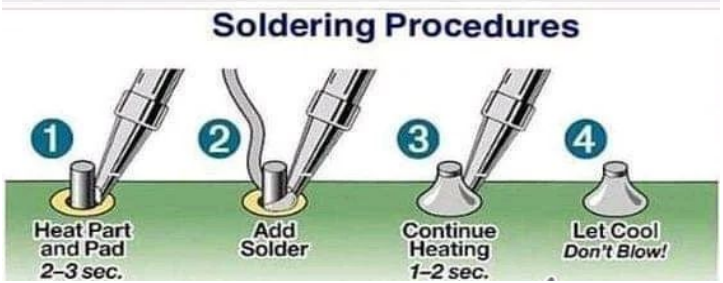
brush

A solder station works better

1. Temperature control & maintain
2. Display
3. Accessories - tip cleaning scrub, stand etc

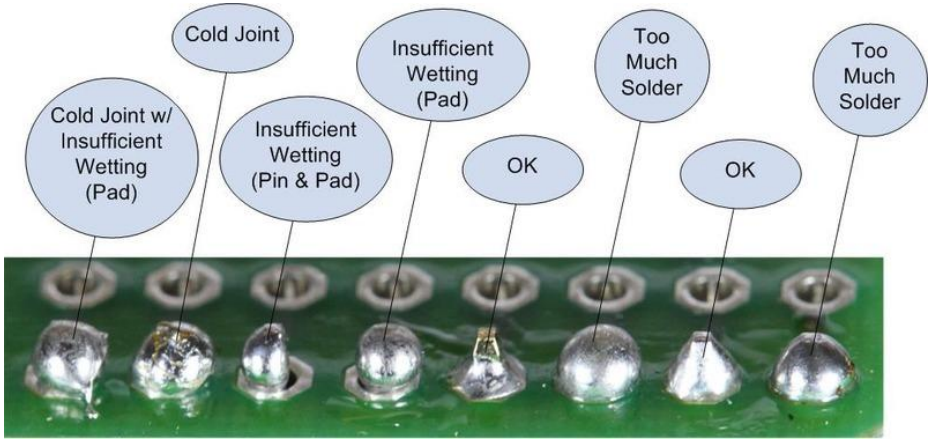
<

Make a proper joint



A good solder joint

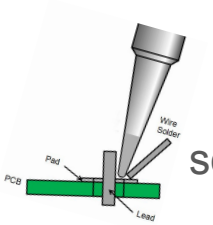
Use this



Remember the cycle

Clean the board

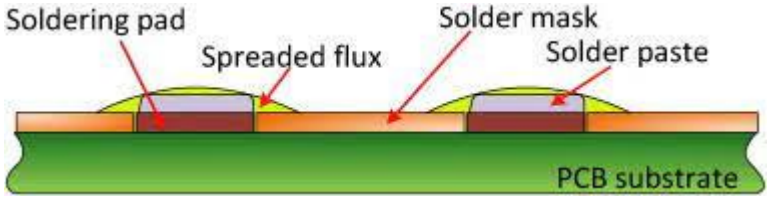
Tin the tip of the soldering iron



solder

Clean and Tin the tip of the soldering iron

Flux is your friend



Prevents oxidation

Reduces the surface tension and helps solder flow

Removes the impurities and improves the bonding

Also prevents re-oxidation

"The better you get at soldering, the less flux you use."

Remove flux post soldering

Flux residue is corrosive

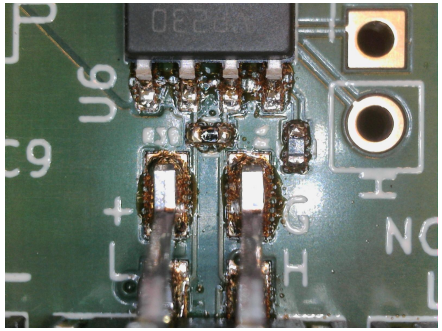
Looks bad

Sticky (dust accumulation in long term)

Fumes when heated

Bad for protective coatings

Absorbs moisture - gets conductive - short circuit



Practice

Safety first

Focus 

Fume extractor 

Put the soldering iron back on the stand

watch people solder

https://www.youtube.com/watch?v=qaWvCy2DRSA

https://youtu.be/CHoGIvOi-jw?si=1sIaneAL97eMcO1J

https://www.youtube.com/watch?v=PsZszv4qHu4

https://www.youtube.com/watch?v=wopmEyZKnYo

https://www.youtube.com/watch?v=SgV6_Y_sg4k

https://www.youtube.com/watch?v=2UvtLDHi9QY

https://www.youtube.com/watch?v=TpnBQ9bW4K8