

Safety - Gesture SOS

Stay protected in emergencies

- Hand gesture triggers SOS
- sends live location
- offline SMS backup

Health Monitoring

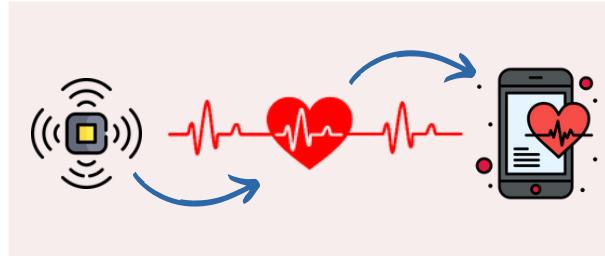
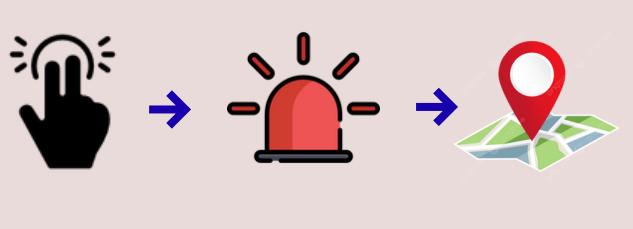
Early detection & wellness tracking

- 24x7 Heartrate & SpO₂ monitoring
- AI insights on phone

Real-time Translation

Break language barriers anywhere

- Speak any Language
- Instant 2 way Translation
- Audio output



Problem



Safety

- Slow emergency response
- 1 in 3 women feel unsafe in public

Health

- Silent medical issues go unnoticed
- 70% emergencies need early detection

Language

- India has 22 languages & 720+ dialects
- Communication breaks in travel & emergencies

Solution



Safety – Gesture SOS

- Gesture → Instant SOS → Live location
- Works even without internet (SMS fallback)

Health – Continuous Monitoring

- 24x7 HR + SpO₂ tracking
- AI alerts for abnormal patterns

Communication – Live Translation

- Speak → Instant translated audio
- Supports multiple language pairs

Impact



Safety Impact

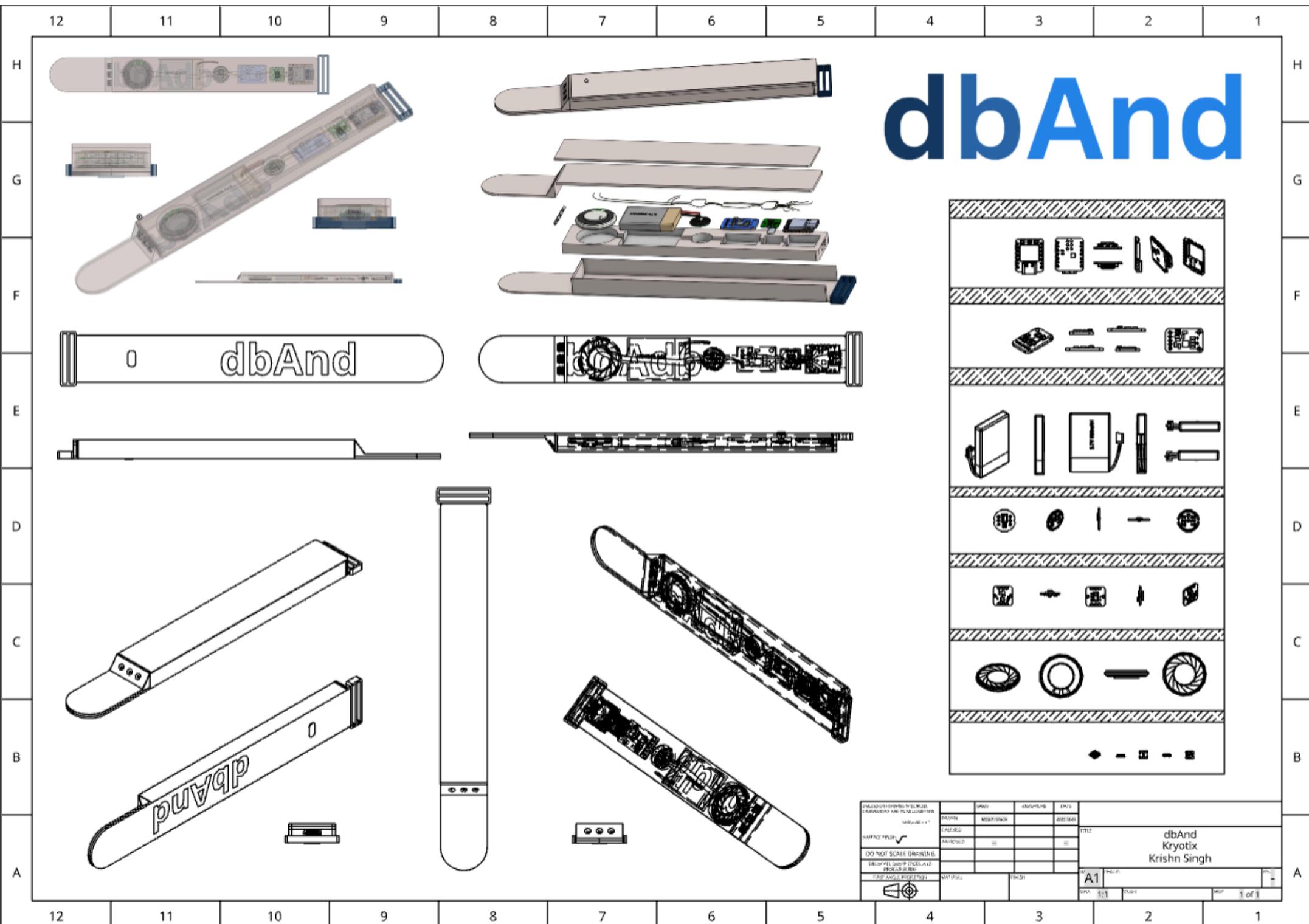
- Faster help = saves lives
- Helps all incl. women, elderly, travelers

Health Impact

- Early detection prevents emergencies
- Daily wellness support

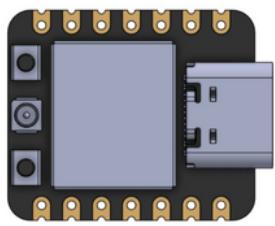
Communication Impact

- Removes language barriers
- Enables travel, inclusivity & confidence

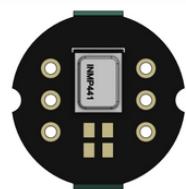


dbAnd

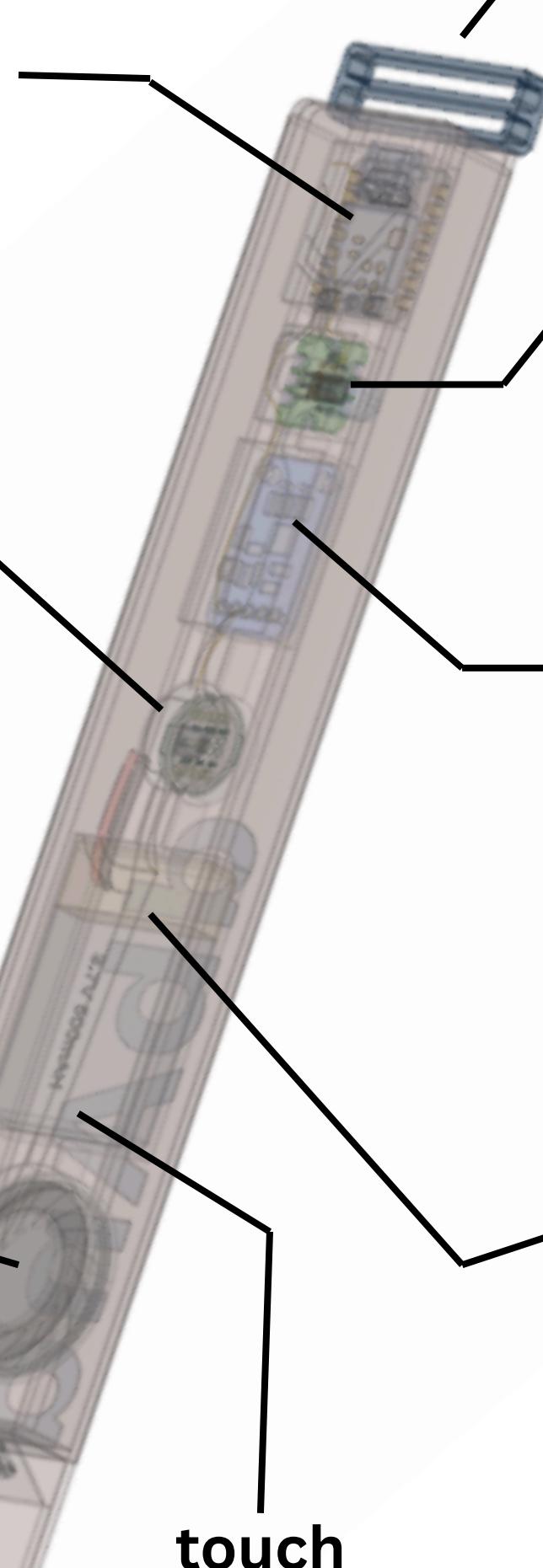
Seeed Studio
XIAO ESP32-C3



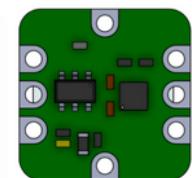
INMP441 digital
 I^2S microphone



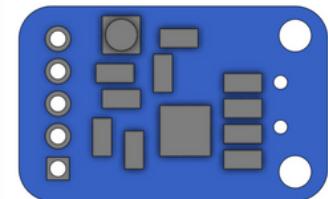
8 Ω 2W mini
speaker



MAXREFDES117
Sensor



PAM8302 audio
amplifier



3.7V 600mAh
Li-Po
battery



Under ₹999

touch
sensors

Highly Adaptable



Physical Design / Dimensions

- Band length: 240 mm (adjustable)
- Band width: 25 mm
- Fabric thickness: 3 mm
- Electronics thickness: 7–10 mm
- Module size: $\approx 50 \times 22 \times 10$ mm
- Battery size: $\approx 30 \times 20 \times 5$ mm (500–600 mAh)

KiCad



Key Features

- SOS via touch/gesture
- Auto live location to police & contacts
- Offline SMS emergency support
- Continuous HR & SpO₂ (MAXREFDES117)
- Real-time speech translation (app)
- Voice input/output (mic + speaker)
- Dual capacitive touch (nav + SOS)
- RGB micro-LED alerts/status
- BLE smartphone link for AI features
- 6–12 hr battery, power-optimized
- Sleek fabric wristband design

 onshape®