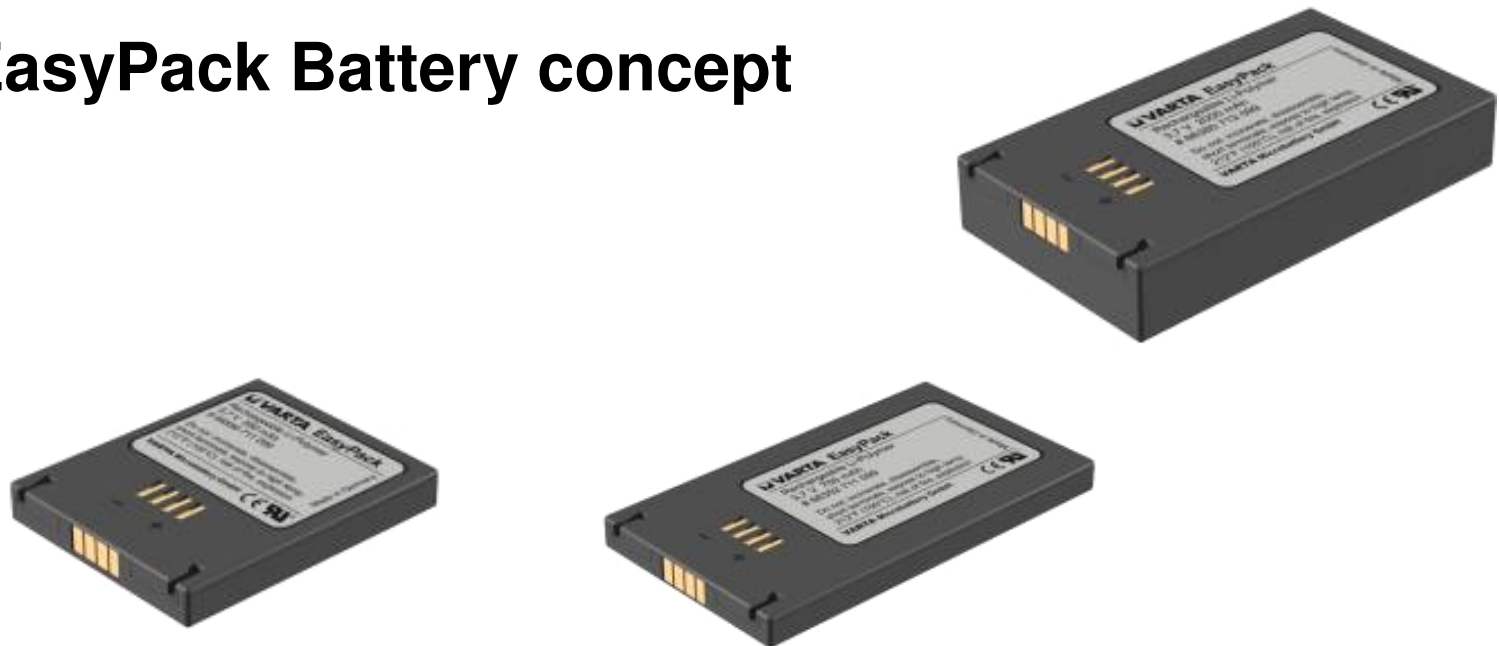


VARTA Microbattery

VARTA EasyPack Battery concept



Patent pending

The **Concept**

The VARTA EasyPack **Battery**

Mechanical **Design In proposal**

The EasyPack **Evaluation Kit**

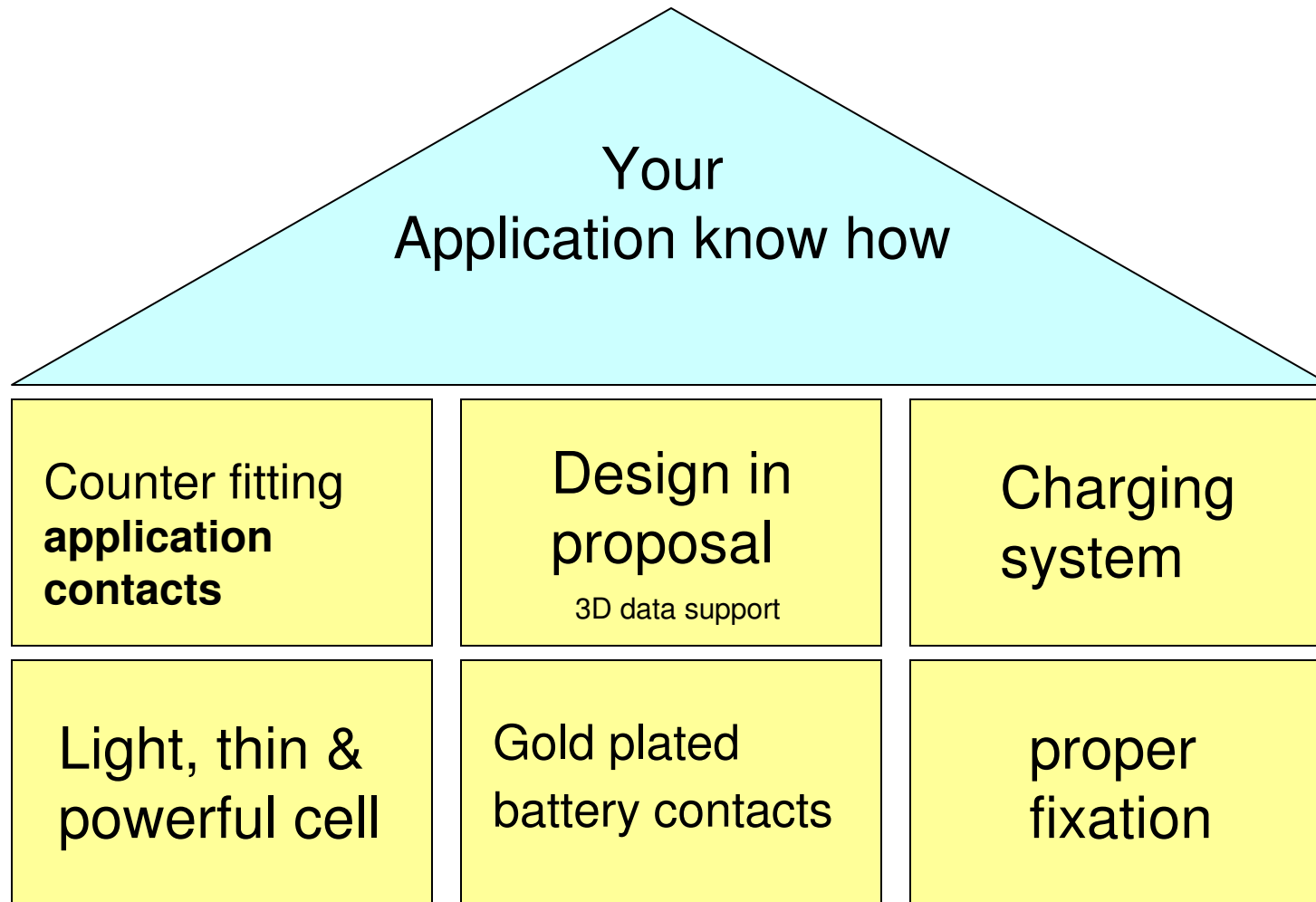
Off the shelf charger solutions

Counter fitting connector information

Backup Information

VARTA EasyPack Concept → The „off the shelf solution“

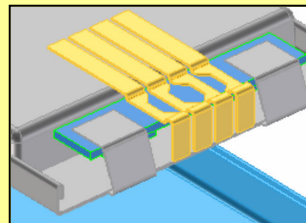
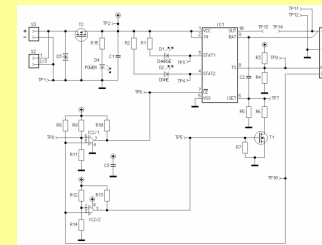
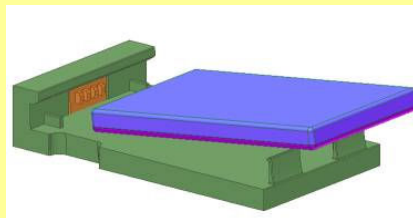
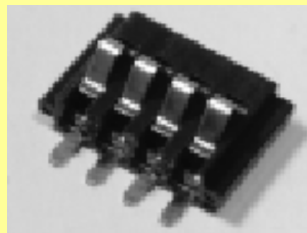
What is needed to build your portable application?



VARTA EasyPack Concept → The „off the shelf solution“

Here the solution!

The pride of creation
YOUR Application



VARTA EasyPack → Benefits**Time to Market!**

The ready to use battery allows designer fast prototyping and secures project schedules. No need for 'battery project management'.

Minimized NRE cost!

- no NRE cost for **battery housing** needed
- no NRE cost for **battery contacts** needed
- no NRE cost for **counter fitting application contacts** needed
- no NRE cost for **charging/charger design** needed

Reduced Design In times**Various footprints and capacity – one contact method!**

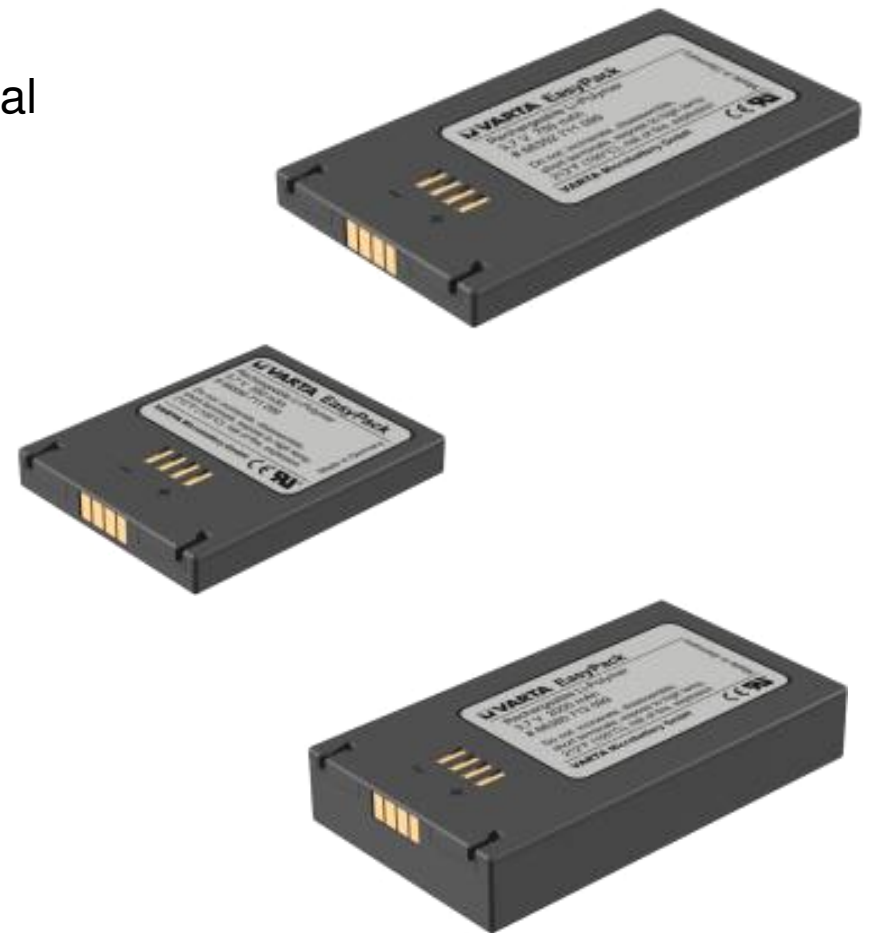
Patent pending

The VARTA EasyPack

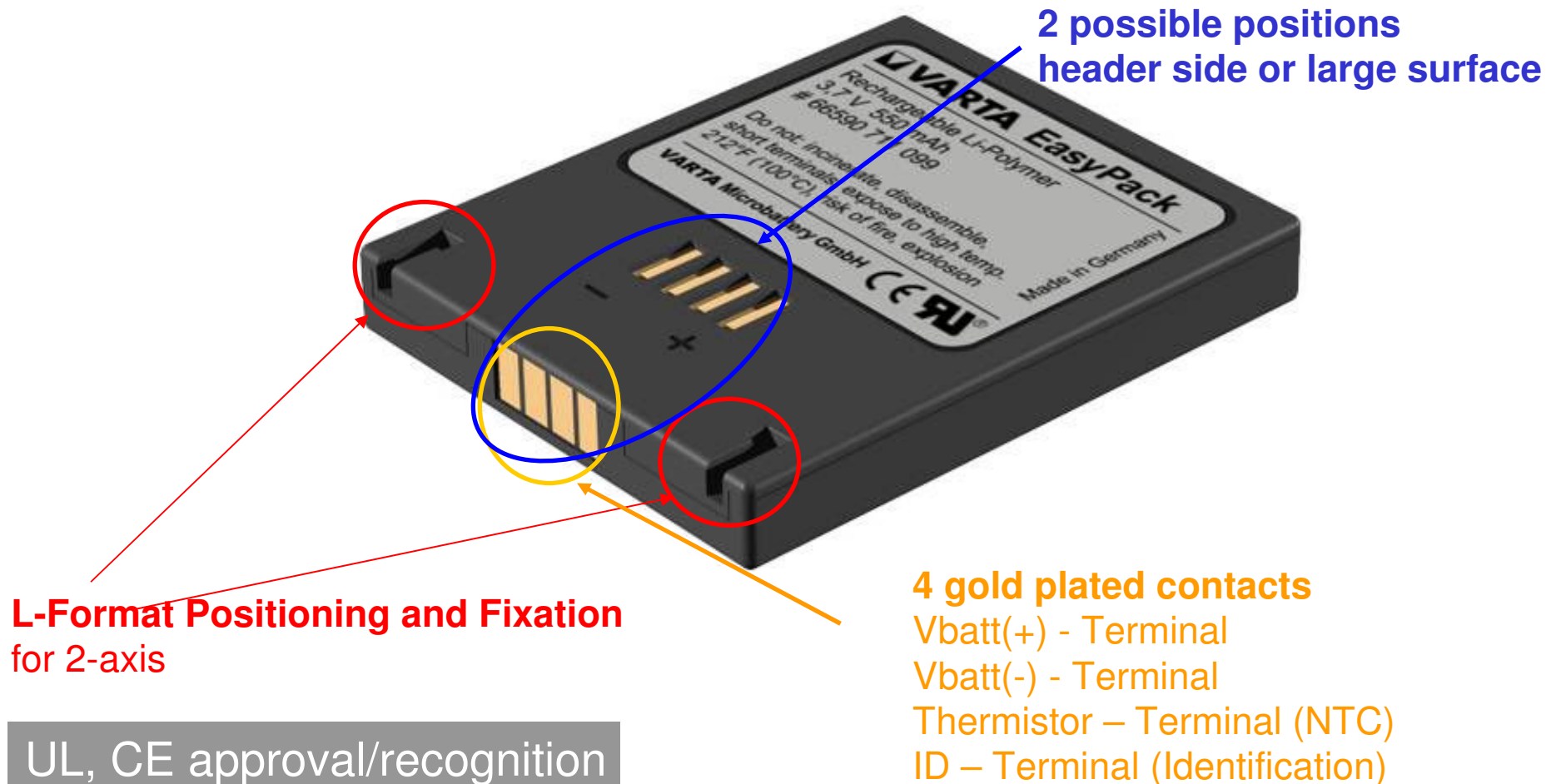
Battery pack solutions for small and medium volumes

VARTA Microbattery offers cost effective solutions for small/medium volume projects, respectively allows to start with a professional battery pack at low initial investment.

- uses standard PCM
- plastic pack with high tech PC (polycarbonate) material
- Gold plated contacts
- VBAT+, VBAT-, ID contact, Thermistor
- cost efficient design to allow fast and cost effective tooling



Patent pending

“VARTA EasyPack” → The Battery**high energy, lowest weight and slim design**

VARTA EasyPack: Actual 4 different types

VARTA EasyPack, 550mAh



VARTA EasyPack, 750mAh



VARTA EasyPack, 1000mAh



VARTA EasyPack, 2000mAh



Patent pending

EasyPack overview

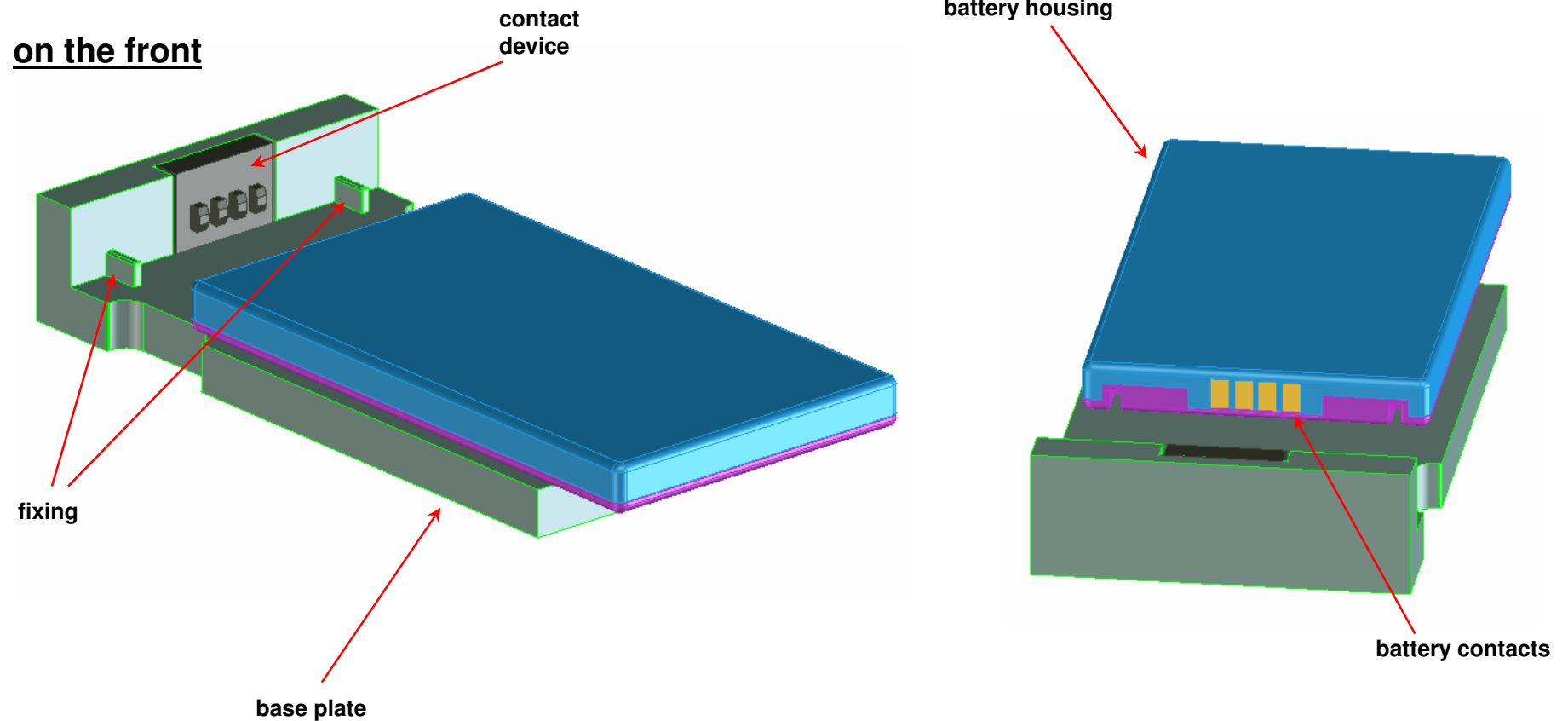
Type Designation	Order No.	Voltage (V)	Capacity actual (mAh)	Height (mm)	Length (mm)	Width (mm)	Weight (g)
VARTA EasyPack 550	66590 711 099	3.7	550	5.8	43.5	35.4	14
VARTA EasyPack 750	66352 711 099	3.7	750	5.2	64.5	36.6	20
VARTA EasyPack 1000	66380 711 099	3.7	1000	6.4	64.5	36.6	25
VARTA EasyPack 2000	66380 712 099	3.7	2000	11.4	64.5	36.6	46.5

- please refer to technical drawing for final measures and tolerances
- data sheet parameters must be considered for design in
- The latest version of the cell data sheet and the 'Handling, Precautions and Prohibitions for Varta PoLiFlex batteries' must be observed in any design process.

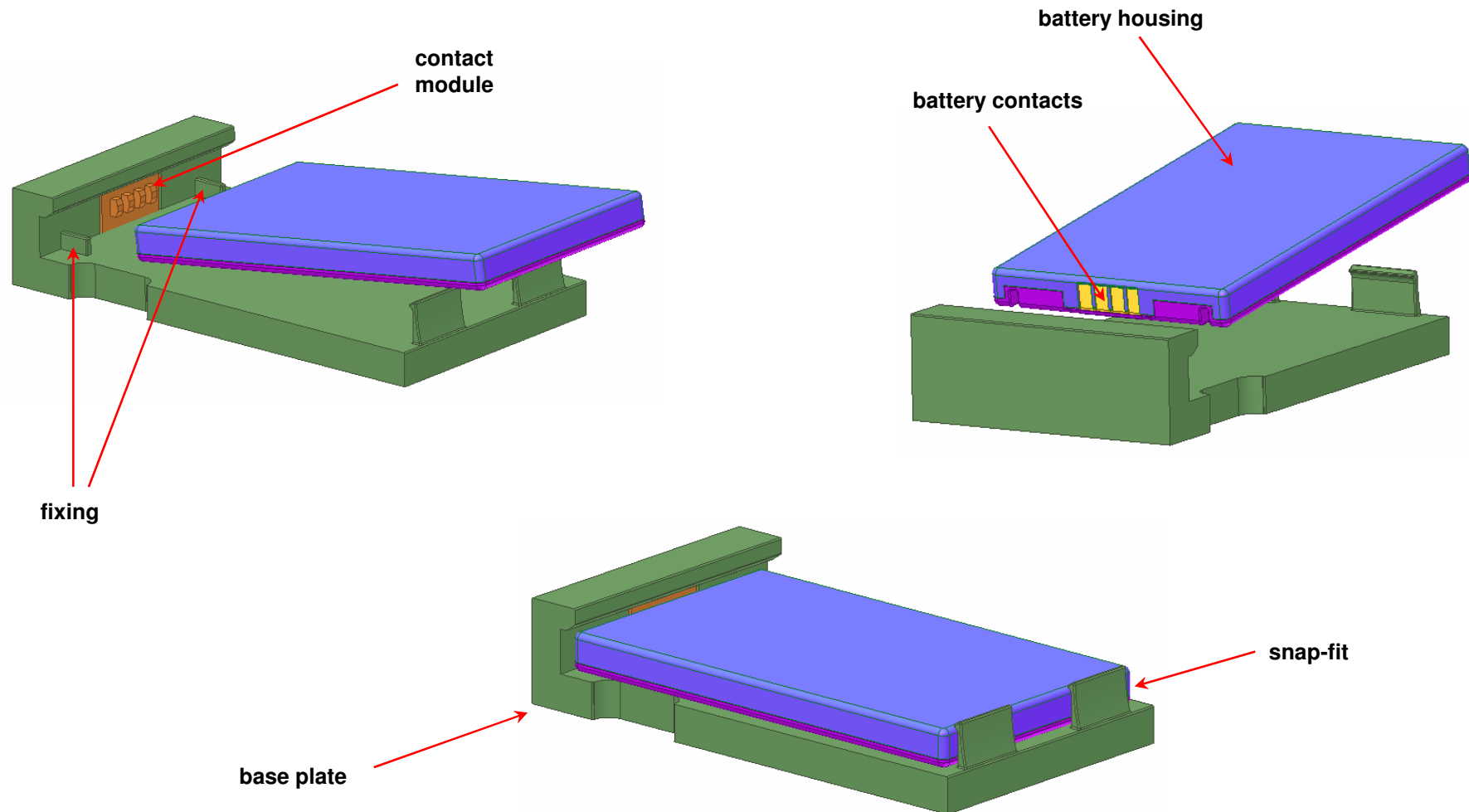


Patent pending

Design In proposals for connection
to your application

VARTA EasyPack: example connecting to front / header**contact pitch: 2.5mm**

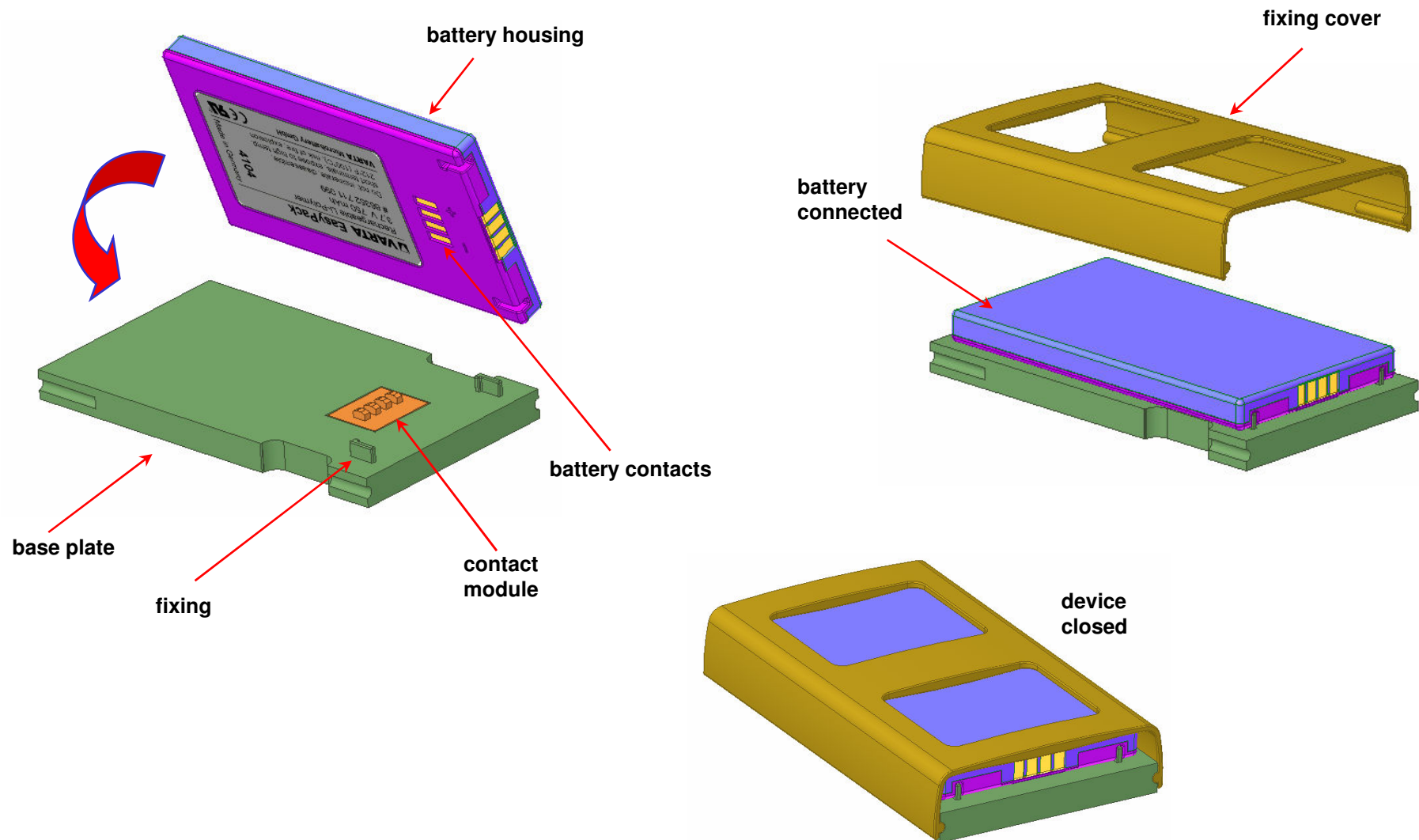
Patent pending

VARTA EasyPack: example connecting to front / header**contact pitch: 2.5mm**

Patent pending

VARTA EasyPack connecting to surface

contact pitch: 2.5mm



Patent pending

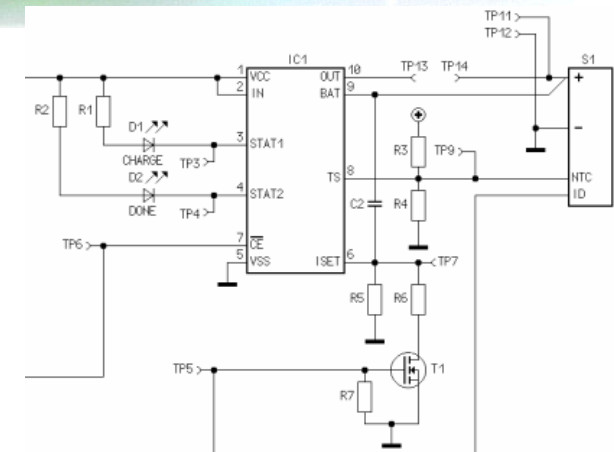
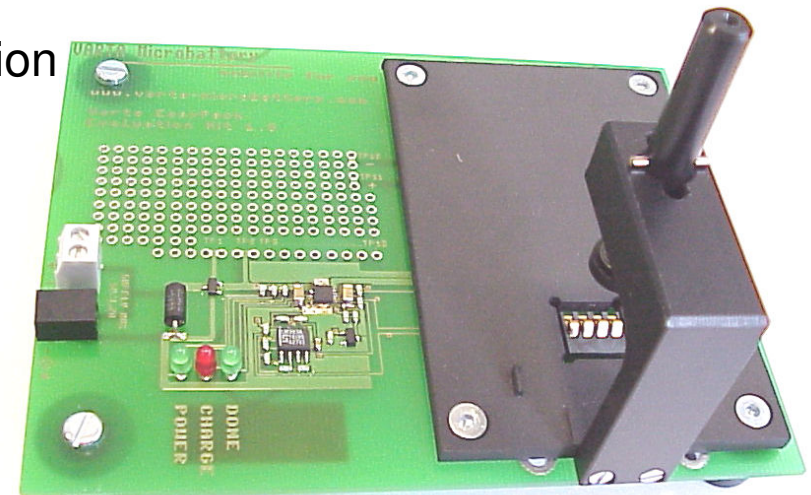
The VARTA EasyPack Evaluation Kit

VARTA EasyPack Evaluation Kit

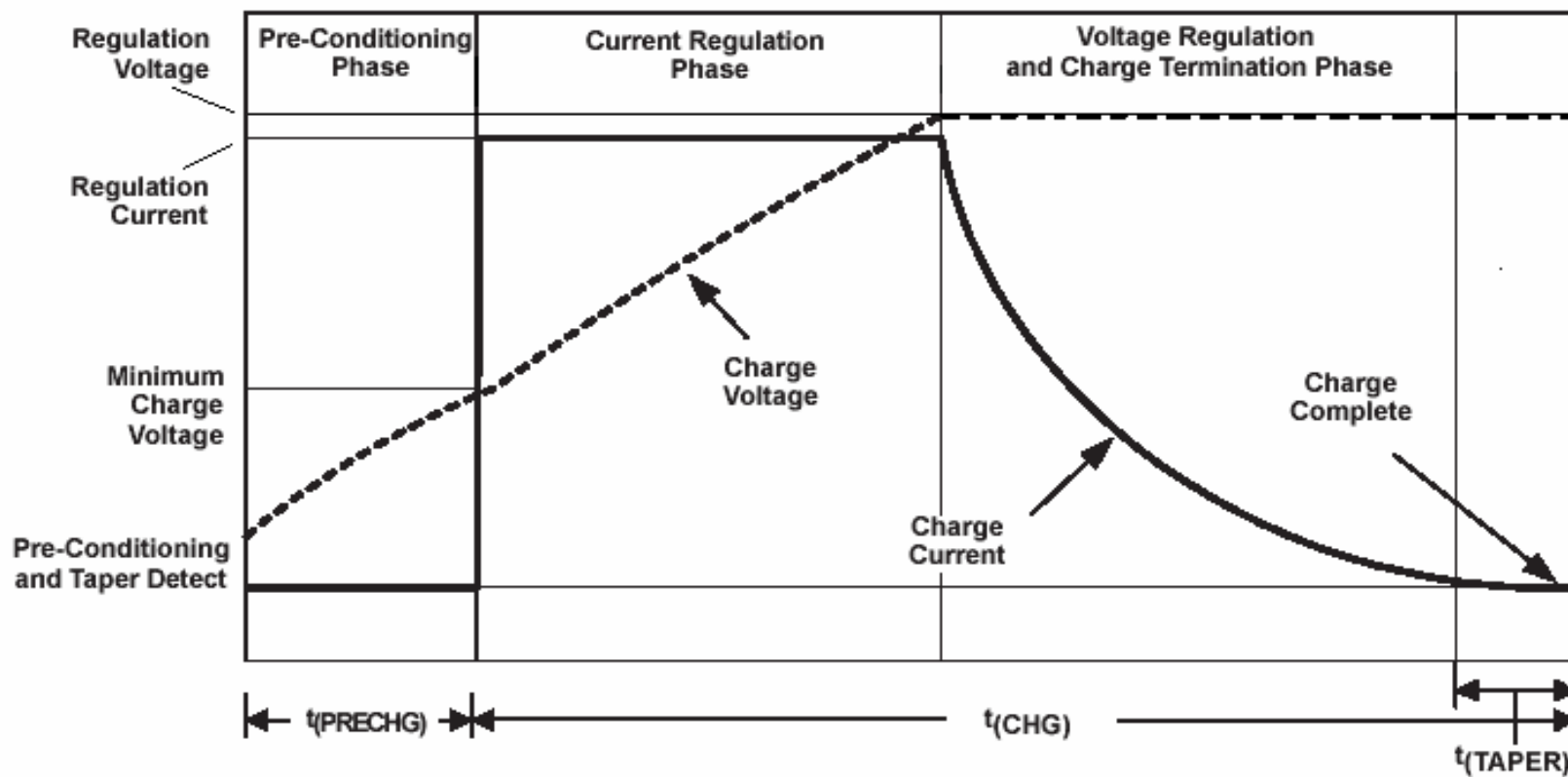


VARTA EasyPack Evaluation Kit

- Plug & Play charging solution based on TI bq 24014 charging IC
- Linear controller → no interference to the application
- fits all VARTA EasyPacks
- Input 5V, 1A
- Charging current 500mA/1000mA
- EASY access to IC test pins and battery contacts
- Additional breadboard space to mount individual components
- Blue prints and parts list available
secure EASY and seamless integration to the application



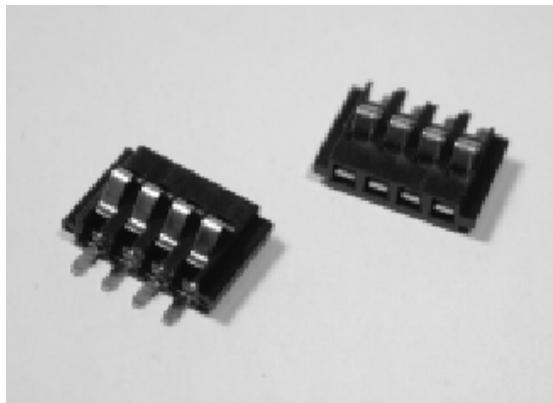
VARTA EasyPack Evaluation Kit – principle operating mode



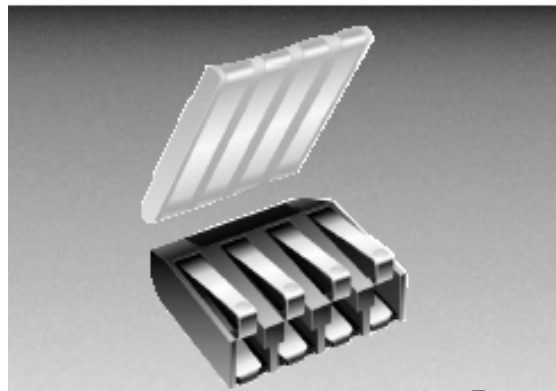
The VARTA EasyPack counter fitting connectors

VARTA EasyPack: Examples of counter fitting battery connector

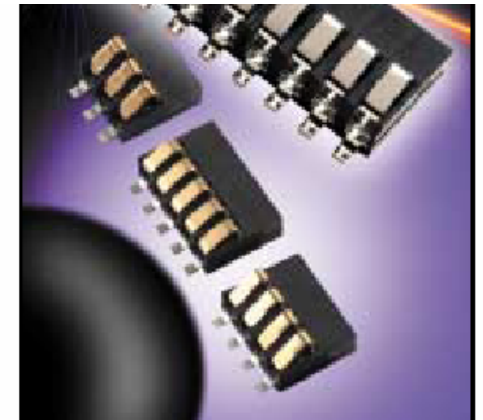
as standard component available



SUYIN 25007



Bourns 70 AAM



AVX 9155 MOBO

VARTA EasyPack: Drawing and Details

- AVAILABLE -



VARTA EasyPack SUMMARY

• Features

Marketing (customer)

- Ready to Go → Fast time to market, Reduced design in times
- High Energy, Slim, Thin & Lightweight design
- consumer replaceable battery (UL recognition, CE...)

•Technical:

- Two contact positions possible
- Gold plated contacts: +/- ID-resistor, Thermal Sensor integrated,
- ALL needed System Parts available, VARTA EasyPack, charging, counter fitting connectors
- For CAD: 3D-data for all VARTA EasyPack versions – on special request

•Value proposition / Selling points

- **Short design in time → Easy to use, complete system solution from the shelf**
- No NRE cost, Lower System cost