6TH GENERATION BMW eDRIVE TECHNOLOGY.

Martin Schuster

Vice President Battery Cell and Cell Module

Andreas Unverdorben

Vice President Powertrain & High-Voltage Battery Neue Klasse



OUR COMPETITIVE ADVANTAGE: THE ELECTRIC MOBILITY KNOW HOW WE HAVE BUILT UP SINCE 2008.

EXTENSIVE BATTERY EXPERTISE THROUGHOUT THE VALUE CHAIN AT BMW.



Cell manufacturing competence center (CMCC)

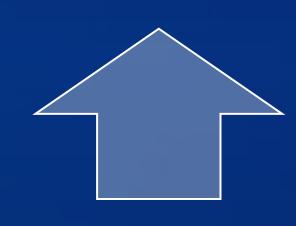
PACK-DESIGN: INHOUSE FROM HARDWARE TO SOFTWARE & INTEGRATION

Pilot lines for high-voltage batteries

Series production of high-voltage batteries



Energy density



Safety

BALANCING OF FUNCTIONAL PROPERTIES

Power (Charge/Discharge)



Lifetime



Sustainability

ALL NEW FOR THE 6TH GENERATION BMW eDRIVE TECHNOLOGY AND BRIMMING WITH BMW EXPERTISE: CYLINDRICAL BATTERY CELLS.



+20% ENERGY DENSITY ON CELL LEVEL

compared to our current prismatic battery cells (Gen5).

OPTIMUM FUNCTIONAL PROPERTIES

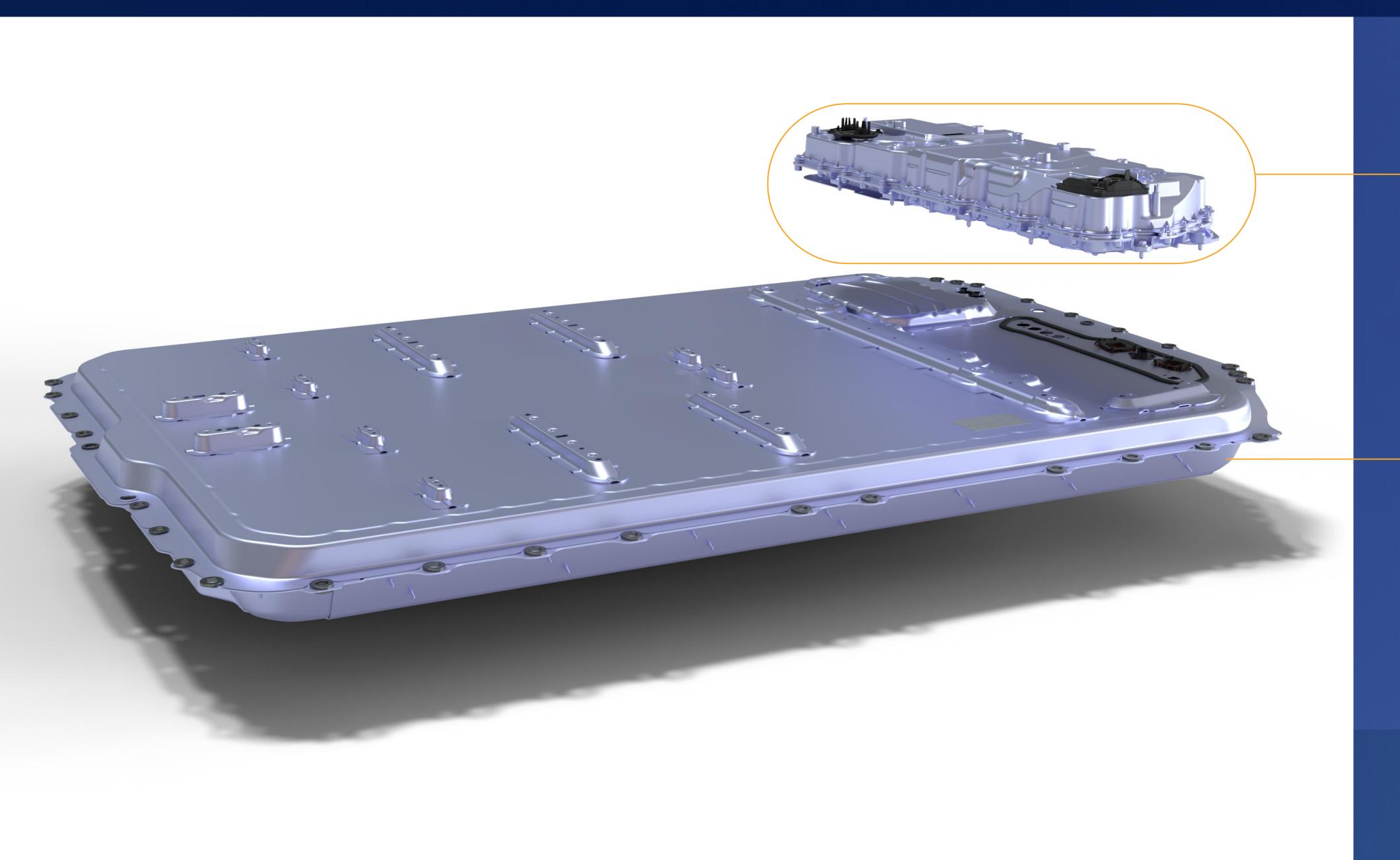
for complete product range.

The optimum balance for our customers worldwide in terms of SAFETY, RANGE, CHARGING TIME & LONGEVITY.

CELL-TO-PACK – No modules, no struts.

High energy density on pack level & significant cost advantage.

CHARGE FASTER, DRIVE FURTHER: NEW HIGH-VOLTAGE BATTERY CONCEPT FOR GEN 6TH BMW eDRIVE TECHNOLOGY.



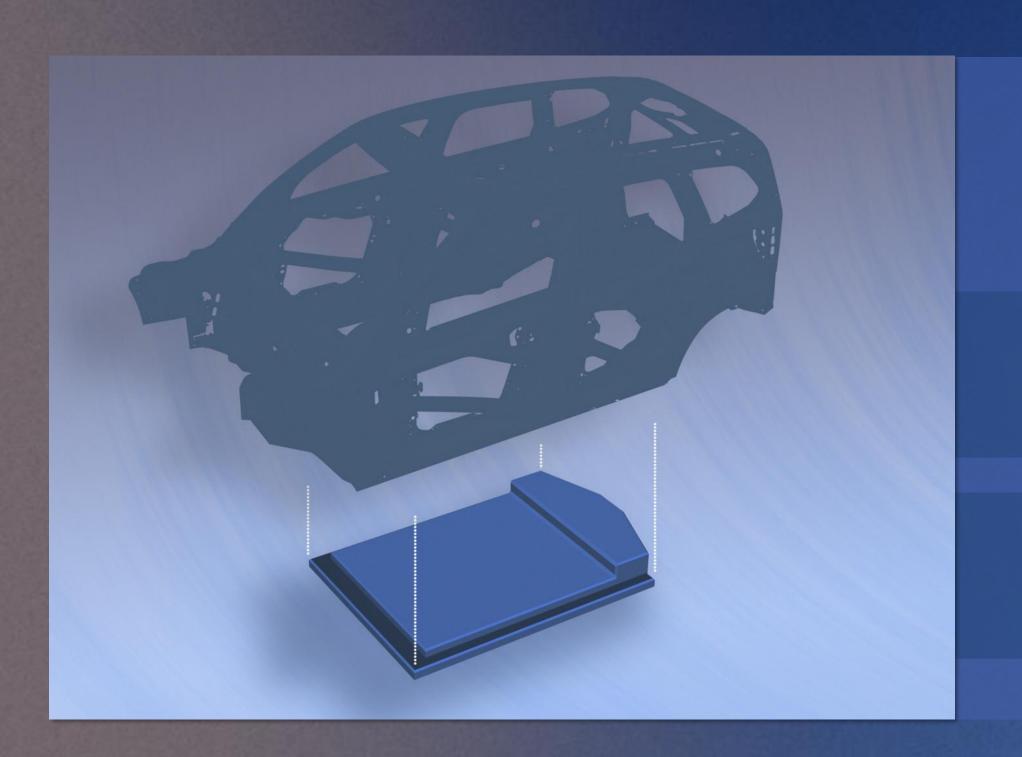
HIGH-VOLTAGE BATTERY CONTROL MODULE.

Intelligent interface for high-voltage and low-voltage power supply and data from the battery. It ensures efficient and safe battery operation.

HIGH-VOLTAGE BATTERY.

- Efficient and flat design
- One 800 V concept for the whole fully electric portfolio
- Energy content for the BMW iX3 50 xDrive: 108 kWh (UBE EU)

The concept represents an expression of BMW's **extensive battery expertise** into the finest details.



PACK-TO-OPEN-BODY.

- High structural integration with optimum usability.
- Weight saving & positive effect on aerodynamics.

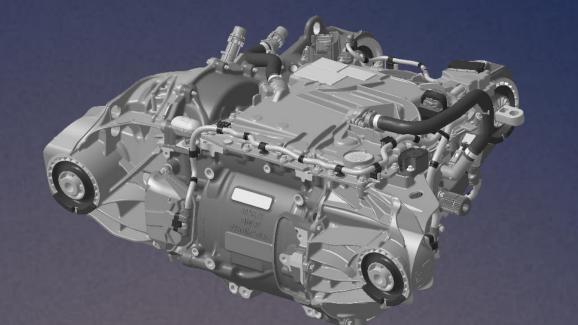
OUR ELECTRIC ENGINE PORTFOLIO FOR THE GEN6: TECHNOLOGY FLEXIBILITY – ADDING ASM TECHNOLOGY TO EESM.



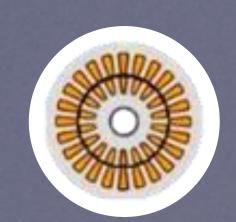
Externally Excited Synchronous Motor



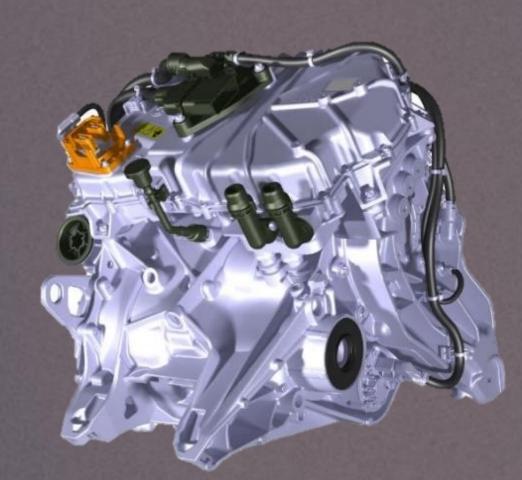
SiC technology



- High Efficiency
- Power at high speeds
- Sustainability



Asynchronous Motor



- Compact design
- Cost effectiveness
- Weight



- 40 %

- 10% weight

- 20 % manufacturing costs

350 (m) add, range WLTP compared to the predecessor BMW iX3 (2021)

85 km out of the electric engine efficiency











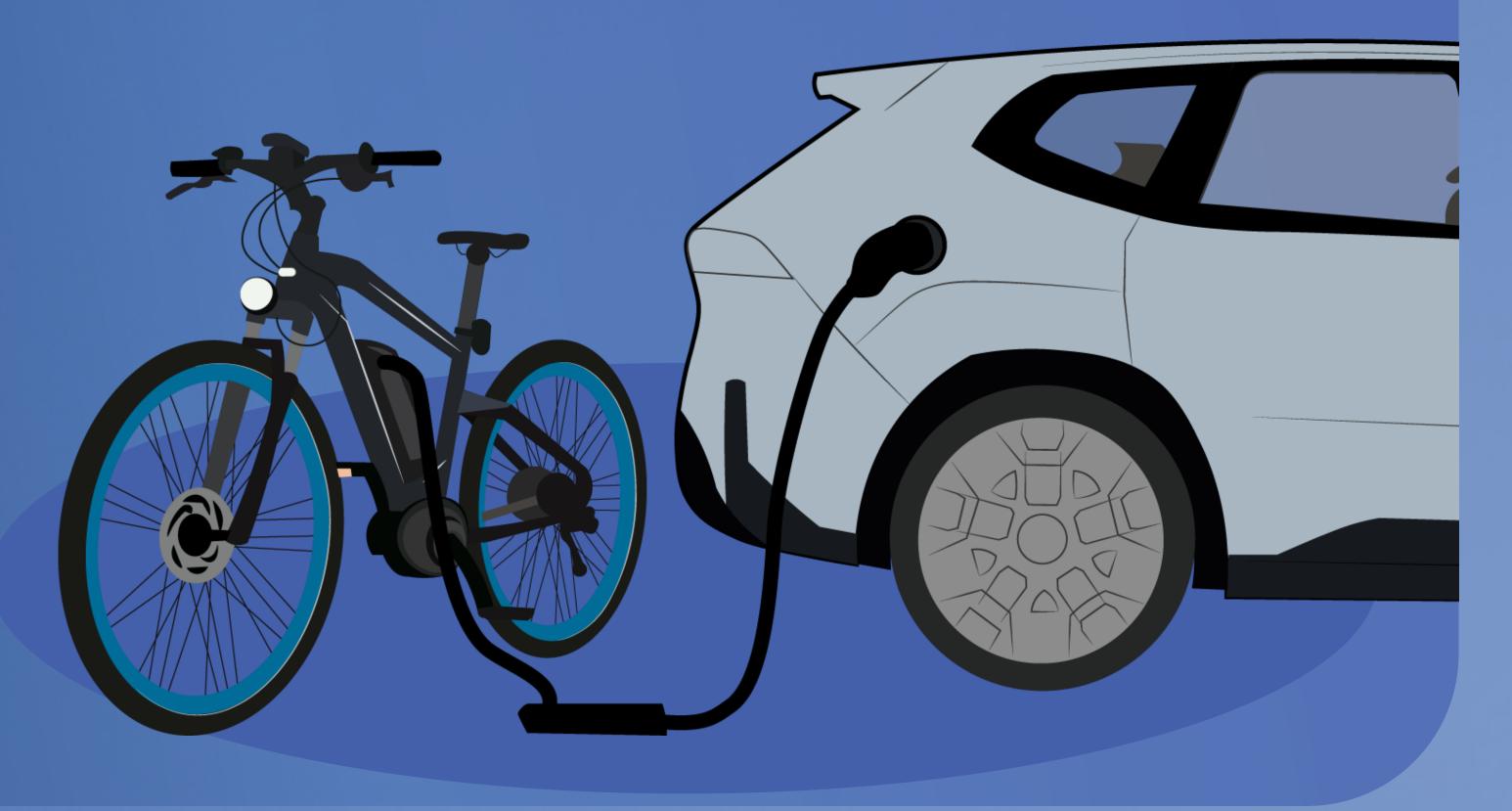
800 V Technology

... charging at 400 V DC points will still be possible.

BIDIRECTIONAL CHARGING – to load, to home, to grid.



YOUR BMW AS MOBILE POWER BANK.



GEN6: CHARGE FASTER, DRIVE FURTHER – AND THE BMW IX3 50 XDRIVE IS THE FIRST TO BENEFIT.

With improved and new technologies for our electric engine portfolio,

... optimum cells and a cutting-edge high-voltage battery concept,

... the Gen6 electrifies our complete fully electric vehicle line-up – across all vehicle segments.

Our Gen6 delivers a significant leap in all customer features.



19800 km electric range (WLTP)

ريم 15,0 kWh/100 km

energy consumption

- 20 % compared to the predecessor BMW iX3 (2021)