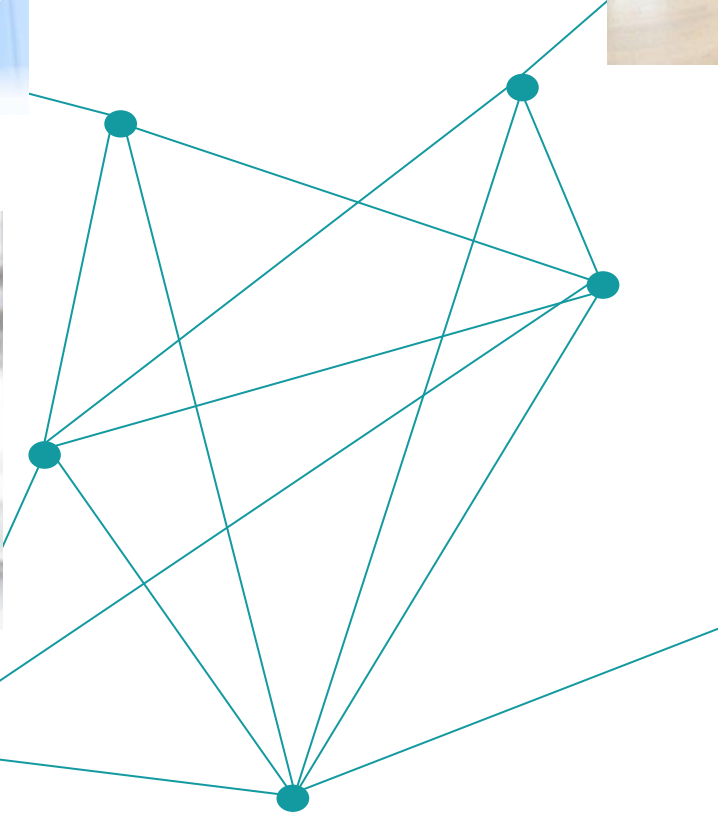


THE WORLD OF 5G AND CONNECTIVITY: GETTING INNOVATION RIGHT



5G as an Enabler



Digital Transformation

Driving forward a Connected Economy



- ▶ Bosch is one of the world's leading providers of technology and services and over the past five years has invested over £26bn in Research and Development.
- ▶ Universal connectivity is revolutionising the economy. These technologies will improve quality of life for everyone and lead to major energy savings across society, driving forward decarbonisation.

Digital Transformation

Challenges in Consumer IoT



Infrastructure

How to make sure everyone across the country has the right level of connectivity?



Public Acceptance

How to make sure the public understands the benefits of IOT and adopts the technologies?



Compatibility

How to navigate so many different technologies competing to become the standard?



Security and Privacy

How to make IOT secure for consumers and guarantee the safety of user data?

Digital Transformation Laboratory Diagnostics



- ▶ Bosch's Vivalytic is a universal platform for molecular diagnostics allowing automated, rapid analysis of a wide variety of sample materials.
- ▶ The platform allows tests that previously had to be done in a laboratory to be conducted anywhere. Bosch has used Vivalytic to develop a rapid, 30 minute PCR Test for Coronavirus.

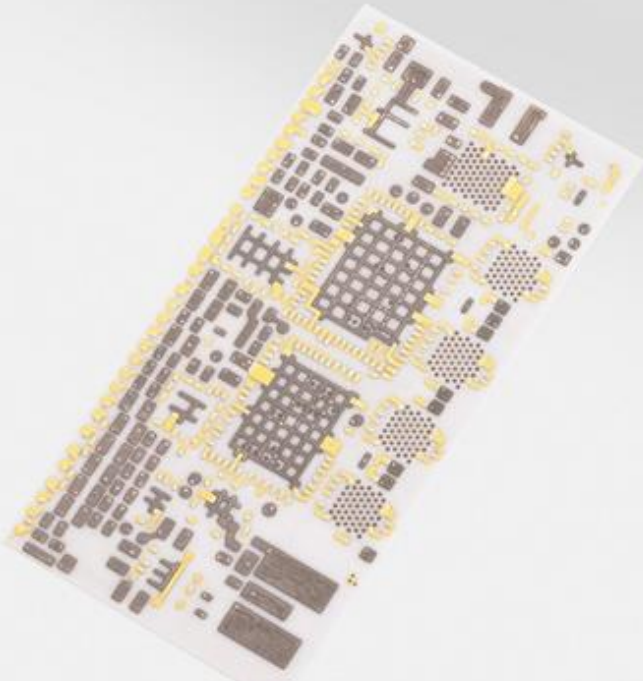
Digital Transformation Therapy Management



- ▶ Bosch's Vivatmo is the world's first FeNO measuring device for home use, allowing quick, easy and reliable measurement of airway inflammation.
- ▶ Combined with the app, Vivatmo allows asthma patients to monitor their condition and improve the quality and impact of therapy.

Digital Transformation

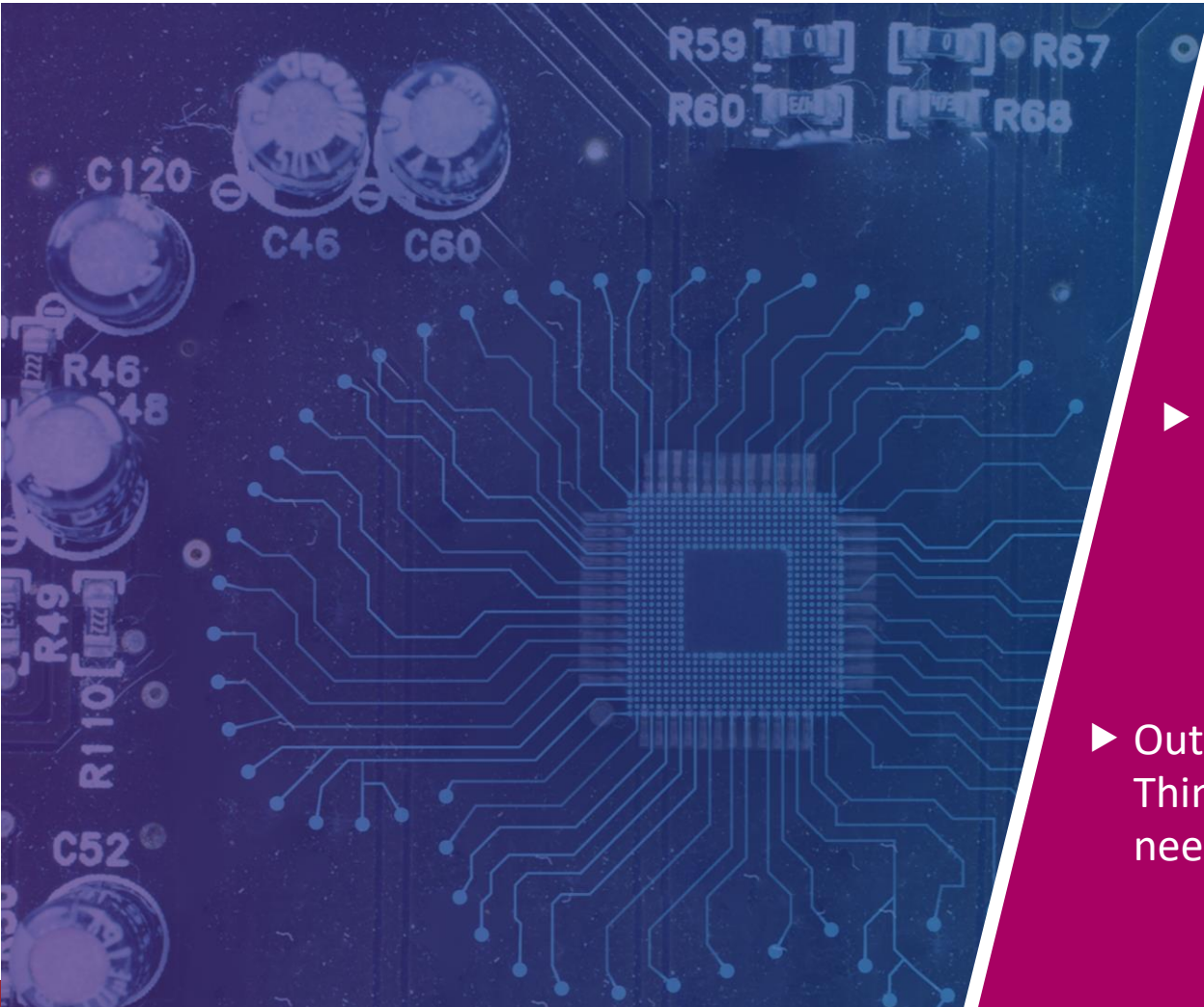
High-tech Components



- ▶ Bosch has been a specialist for high-quality customised solutions in technical ceramics for over 100 years. We have transferred this expertise from the automotive sector to healthcare applications.
- ▶ We offer a variety of processes for producing high-quality ceramic products for the medical industry.

Digital Transformation

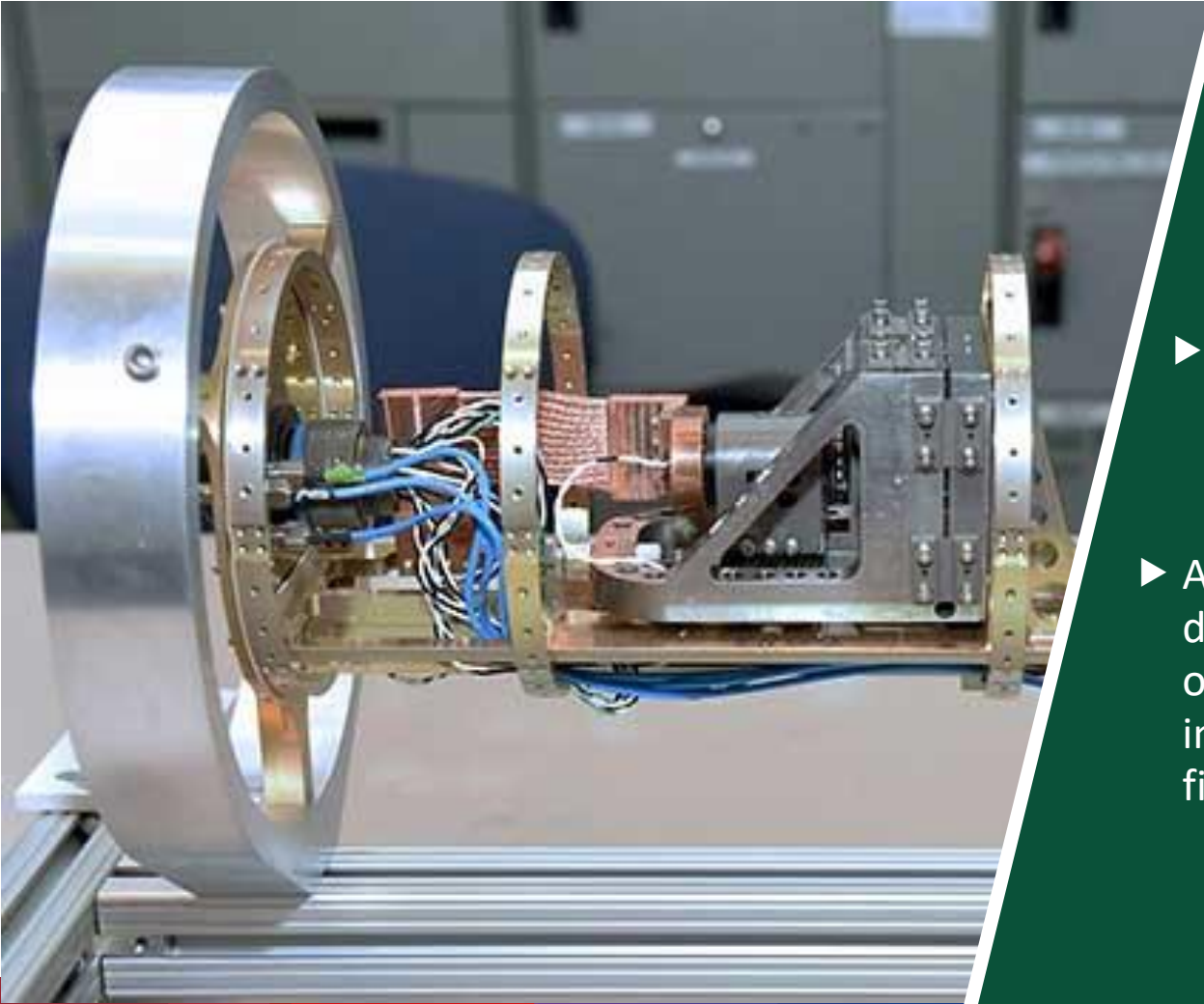
Artificial Intelligence



- ▶ Artificial Intelligence is not just about creating models of human behavior for machines to follow- it is also about explaining the physical world to machines.
- ▶ This approach can revolutionise industrial applications like Quality Control, predictive maintenance, production optimisation and generative design.
- ▶ Outside industry, AI can also improve the Internet of Things, ensuring decisions that anticipate human needs and behavior.

Digital Transformation

Quantum Sensing



- ▶ Quantum computers make use of quantum bits, enabling computing tasks that are outside of the reach of even the best computers today.
- ▶ Bosch is developing Quantum Magnetometers, which allow the sensing of magnetic force.
- ▶ A Quantum Magnetometer is so sensitive it can detect tiny magnetic fluctuations in the brain. This opens up the possibility of brain-machine interfaces, with huge potential in the healthcare field.