### **Application Study**

# Stability-optimized Hardware Solutions for Life-saving Ventilators

Bringing Stable Memory and Storage Solutions to Critical ICU Ventilators



Innodisk provided its healthcare-optimized memory and storage expertise and solutions to a leading European healthcare equipment manufacturer.

#### Introduction

Facing an unprecedented boom in demand due to the 2020 coronavirus pandemic, a leading European manufacturer of ICU ventilators and respirator solutions tasked Innodisk with supplying a significant volume of healthcare-optimized memory and storage solutions for their ventilators. Due to the extremely key role of ventilators, the memory and storage solutions needed to meet stringent stability requirements while also being provided to the manufacturer in high volumes in no time.



## Our Roadmap to Success

#### **DDR3L SODIMM**

- Optimized for high stability
- Excellent performance in a compact form factor
- · High longevity
- · Guaranteed long-term supply

#### mSATA 3IE3

- Innodisk-exclusive iSLC firmware architecture
- · Intelligent error recovery system
- Supports iSMART/iCAP health monitoring system
- · SATA 6.0 Gb/s interface

#### **Challenges**

- The memory modules and storage devices must be able to function perfectly and without interruption for lengthy periods
- High performance in compact form factors that fit into ventilators' limited space without causing thermal issues
- · Must be able to deliver large quantities in no time

#### **Solutions**

- The DDR3L SODIMM series from Innodisk brought all the required performance and stability in a capable yet compact package
- Innodisk's iSLC mSATA 3IE3 series supplied stabilityoptimized performance in a compact form factor
- Innodisk's global team delivered exceptional turnaround times and unmatched application-specific expertise, allowing the solutions to be provided to the customer quickly and exceeding quality requirements

#### Result

Innodisk was able to quickly deliver highly capable industrial-grade memory and storage solutions in form factors and with unique technologies perfectly suited for ICU ventilators. Innodisk's DDR3L SODIMM DRAM modules provided ample performance and unmatched stability in a compact form factor ideal for the limited space inside ventilators. Moreover, Innodisk's mSATA 3IE3 with proprietary iSLC flash and a compact anti-vibration design provided the ventilators with exceptional performance and stability. With these solutions provided in massive volumes without delay, Innodisk enabled the client to deliver its life-saving ventilators to healthcare professional in no time.

