

Success Story - They Chose Apacer

Challenges

- Extremely low tolerance for downtime
- Device operational lifetime has to be up to 10 years
- Polluted environment

Solutions

2.5" SSD SV250-25

Value-added technologies

- **Hardware:**
Conformal coating
- **Software:**
SSDWidget 2.0
CoreAnalyzer2

Implements Apacer DataDefender™ for preventing data corruption due to unexpected power failure

Introduction

Manufacturers around the world are realizing the advantages of factory automation, and investing R&D resources in developing their strengths in this field. In addition to the obvious cost reductions in manpower, the appeal lies in developing reliable production facilities that can function even in adverse environments. But developing truly independent automated facilities requires components with incredible reliability and robust designs. That's where Apacer enters the picture.



The Customer and the Application

A system integrator based in the Asia-Pacific region approached Apacer for assistance with their latest project. They required an ultra-reliable data storage solution for their latest project, which was a food processing system equipped with SCADA technology.

Challenges

This food processing system had to be able to continuously operate around the clock and had an extremely low tolerance for downtime. Yet it was also designed to have an operational lifetime of up to 10 years, so only the most durable components could be chosen. And due to various platform and module restrictions due to legacy hardware and software, the client was concerned about compatibility issues.

Due to the nature of SCADA operation, dynamic data transmission would be necessary at all hours. The client also predicted that voltage instability might be an issue in some locations in the Asia-Pacific region. With all these challenges in mind, Apacer's team of experienced engineers set to work.

Solutions and Technologies

Apacer's engineering team studied the problem closely and came up with some recommendations for the client. First of all, they recommended the client integrate Apacer's Double-barreled Solution into their system. The SSDWidget2.0 application, which is one of the two key elements of the Double-barreled Solution, would allow operators to determine when an SSD was reaching the end of its operational lifetime, and let them replace it before it ceased to function. This way, downtime would be eliminated and data integrity would be maintained. In fact, Apacer's engineering team carried out some software customizations for this client to ensure there would be no compatibility issues.

In order to prevent data corruption due to unexpected power failure, the Apacer team also recommended that the client adopt Apacer's DataDefender™ technology for the project. This power management system is designed to detect any unexpected drops in voltage and perform a safe shutdown if such an event occurs.

And to allow the system to function in challenging environments, the engineering team finally recommended that the client opt for conformal coating treatments. These would prevent damage that might occur if moisture or detritus (such as food particles) came into contact with sensitive components, helping the client's system remain operational longer.

Results and Benefits:

In the end, the client decided to take all of Apacer's recommendations. This resulted in the creation of a durable, trustworthy food processing system that proved resilient enough to function smoothly even after years of continuous use. The client also let Apacer know that their relationships with their downstream buyers were significantly solidified due to the food processing system's durability and resistance to adverse conditions.

Additional Support



Longevity

Fixed BOM solution,
EOL & LTB notice



Strong customization capabilities

Strong HW/FW
engineering know-how



Service

Real-time and responsive
after-sales service