



Amulet Technologies

Empowering Flat Panel Displays

Arcturus Marine Case Study

Company: Arcturus Marine Systems

Web: www.thrusters.com

Market: Marine Controls

Product: Digital Stabilizer

Solution: Graphical OS Chip™

Company Overview

Arcturus Marine Systems was founded over 15 years ago with the goal of providing high-end bow thrusters that could help simplify the boat-docking maneuver. Since then, they have become a respected industry leader by developing the first fully integrated digital fin-type stabilizer. They developed this product for motor yachts and ferries from 45-250 feet in one year. Arcturus Marine chose Amulet's Graphical OS Chip™ for their new Trac™ Digital Stabilizer System.



Development Challenges

Prior to discovering Amulet's solution, Arcturus Marine's display was powered by a commercial embedded processor board with an 80188 CPU that wrote bitmaps to the display at an inefficient run time, and bogged down the system. With this display and system they were forced to devote a lot of time and resources to coding GUI screens. In addition, they were using three controller boards to support the GUI. They needed a less expensive, more responsive, highly reliable system that would be less work and would allow them to convert as much of the old system as possible in the shortest amount of time.

Amulet's GUI Solution

With Amulet's solution, Arcturus was able to design their own board and incorporate Amulet's Graphical OS Chip™ using a transfective display for enhanced sunlight readability. They were able to save time in software development and lower firmware costs in the process. With Amulet, they were able to quickly and efficiently recreate screens from the old system and easily implement the new communication software. "Once we began working with Amulet's HTML programming capability, we were thrilled to discover that there were many hidden treasures that we hadn't expected," stated Ira Cushing, lead design engineer at Arcturus Marine.

Benefits

By implementing Amulet's solution, Arcturus has been able to dramatically reduce their development time, while seamlessly converting their old system into Amulet's higher performing, more reliable solution. With their previous design method, it took Arcturus one year to develop a less functional, less reliable GUI. "Using Amulet's solution we were able to eliminate hardware from the design, improve responsiveness and reliability and convert over the entire system in about two months, which is exceptionally fast. This was a major remodel of our system," stated Robert Smith, lead software designer for Arcturus. "Amulet improved the overall look and feel of our system by accommodating faster screen changes, and the graphics are smoother than before. With Amulet we are now also able to use the Palm to update the GUI remotely," stated Cushing.

Overall there has been a significant upswing in sales due to the new GUI technology in their Trac™ Digital Stabilizer.

Amulet Production Solutions



Amulet Graphical OS Chip™



Amulet 5.7" Modules



Amulet 3.8" Modules

Contact Amulet at:
www.AmuletTechnologies.com
or call (408) 244-0363

“Amulet significantly reduced our firmware development cost and improved the overall look and feel of our system.”

