

ARDUINO-BASED ROCKET FLIGHT COMPUTER

Joseph Telaak

AIAA Region II Student Conference



INTRODUCTION

- Bullet number one
- A second bullet
- A final, third bullet



WHAT IS A FLIGHT COMPUTER?



APPLICATIONS TO MODEL ROCKETRY



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

EXISTING PRODUCTS



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

WHY BUILD A FLIGHT COMPUTER



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

DESIGN CRITERIA



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

INTRODUCTION ARDUINO



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

IMU



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

BAROMETER



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

GPS



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

STORAGE



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

TELEMETRY



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

CHARGES



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

VOLTAGE CONVERSION



LOAD SWITCHES



DESIGN



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

FUTURE WORK



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

ACKNOWLEDGMENTS



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA

THANKS!

Name

Title

Email

Social



**Engineering
and Computing**
UNIVERSITY OF SOUTH CAROLINA