GPDashcam Component Selection

We are prioritizing inexpensive components that interface using I2C to reduce GPIO pin usage.

Total cost: CA$143.52
High cost because we are not buying bulk and are buying two of each so that we can prototype separately.

Component	Reasoning	Quantity	Cost (CA$)
Freenove ESP32-S3 CAM Board	- Integrated WiFi, camera, and SD card interfaces remove noise that would come from using breakout boards - 16MB flash gives extra headroom for future software features - >30 usable GPIO pins	2	59.90
GY-NEO6MV2 GPS Module	- Large antenna for better signal acquisition	2	19.75
CANADUINO OLED Display 128x64 Pixel	- Cheap display - Interface using I2C	3	18.90
Aideepen OV5640 1 60°	- Wide fish-eye lens to capture more - Compatible with ESP32-S3	2	31.98
GY-521 3 Axis Accelerometer	- Basic accelerometer with I2C	2	12.99