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// debug.hpp: Header file for performing debugging tasks
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#pragma once
#include "pid.hpp"

/** Contains debugging funtions, etc */
namespace debug {
    extern uint32_t fault;

    template <class T>
    static inline T unserialize(PROFILE* stream) {
        alignas(alignof(T)) char buf[sizeof(T)];
        size_t nread = fread((void*)buf, sizeof(T), 1, stream);
        if (nread < sizeof(T)) {
            return T();
        }
        T* out = (T*)buf;
        return *out;
    }

    /** Debug the Cortex if something goes wrong */
    void debug(void);
} // namespace debug

```