Embedded Systems Mark scheme
Coursework 2: Brushless Motor Controller

Criterion	Max. mark	Report	Code	Max.	Marking Scale	Min.
Control of speed and position	50	✓	✓	Optimised control to nearest 0.01 rotation and 0.01 rotation per second speed	Optimised control to nearest 1 rotation and 1 rotation per second speed	Poor control with overshoot or oscillation
Application of real-time programming techniques	15	✓	✓	Robust, efficient and maintainable code with appropriate use of interrupts, threading and thread-safe data and control interfaces	Functional but un-optimised and/or obscure code with potential pitfalss	Buggy or unstable code
Real time system analysis	15	✓		Thorough analysis of dependencies, task deadlines, priorities and utilisation	Reasonable analysis	Dubious analysis
Motor plays melody	10		✓	Yes		No
Automatic optimisation of control parameters	10		✓	Yes		No