

JOB DESCRIPTION	
JOB TITLE	Electronic Hardware Design Engineer
DEPARTMENT	Engineering
REPORTS TO	Director of NPD
RESPONSIBLE FOR	N/A
BUDGET RESPONSIBILITIES	N/A
PURPOSE AND SCOPE OF THE JOB	
<p>The Magstim Group is a dynamic, venture backed medical technology company whose principle technologies include Transcranial Magnetic Stimulation, for the treatment of Major Depressive Disorder and other applications, as well as intra-operative nerve monitoring.</p> <p>To provide Electronic Hardware design support for the Magstim Engineering group. This support will focus on the generation of new and maintenance of existing, low signal patient interface electronic circuits, plus the supporting digital signal processing circuits.</p> <p>This role will be based at our West Wales office, located 20 minutes from the Pembrokeshire coastline and the location of our manufacturing and product development teams.</p>	
DUTIES AND KEY RESPONSIBILITIES	
<ul style="list-style-type: none"> • Update the existing product electronic hardware portfolio to ensure compliance to new standards, component obsolescence or cost reduction. • The generation and maintenance of electronic hardware specifications for new and existing products. • Design of new electronic hardware to meet both market and regulatory product generated requirements. • Perform verification activities including; performing component derating reviews, failure mode effects analysis and bench testing. • Assist in the maintenance of electronic hardware design documentation. • Assist in the generation and upkeep of product risk assessments. • To promote and adhere to the workplace values of HWYL: <ul style="list-style-type: none"> ○ Honesty, integrity and respect for others ○ Willingness to accept challenges and responsibility ○ Your commitment to our customers and business growth ○ Learn and develop. 	
PERSON SPECIFICATION	
SKILLS AND ABILITIES	<ul style="list-style-type: none"> • Degree in Electrical and Electronics, or a closely related discipline. • Low power electronic design. • Analogue and digital circuit design. • Problem solving. • Ability to learn quickly. • Communication – oral and written. • Work as part of a team or independently. • Self-motivated and ability to organise own workload.
EXPERIENCE	<ul style="list-style-type: none"> • 5 years' + experience of circuit design and implementation using discrete and non-discrete components. • Designing analogue circuits for low signal level data capture.

<p>KNOWLEDGE</p>	<ul style="list-style-type: none"> • Designing circuits which comply with the requirements of IEC 60601-1. • Working from and the generation of requirement specifications. • Performing Failure mode effect analysis of electronic circuits. • Designing for manufacture and test. • Ensuring EMC Standards are met during the design phase • PCB design and layout. • Verification of new circuits. • Principals involved in the design of electronic filters. • An understanding of the principals involved in designing analogue to digital interfaces. • Requirements of a Quality Management System. • Medical equipment safety standards, would be advantageous
<p>ATTITUDES AND BEHAVIOURS</p>	<ul style="list-style-type: none"> • Ability to work to tight deadlines and changing priorities • Sound judgement with a confident, mature and pragmatic approach • Disciplined, organised and determined to succeed • Willingness to share accrued knowledge within the wider team and to contribute to the operational planning process • Systematic, consistent and methodical approach to work • Ability to positively influence people at all levels
<p>KEY PERFORMANCE INDICATORS</p> <p><i>Please set out in the form of KPIs what aspects of the employee's duties will be measured so that they are clear what is expected of them and how their performance will be assessed. Please ensure where possible each KPI is measurable, evidence based (e.g. recorded data), objective and linked to the overall business objectives.</i></p>	
<p>HEALTH AND SAFETY</p> <p>It is the duty of each employee to exercise reasonable care to safeguard their own health and wellbeing and that of others who may be affected by their acts or omissions.</p> <p>Role specific hazards; -</p> <ul style="list-style-type: none"> • Working with voltages up to 3000 V d.c. • Working with systems that produce excessive temperatures. • DSE 	

The Company reserves the right to amend this job description from time to time in line with the needs of the business.