

# 12938

Item Text	Option Text 1	Option Text 2	Option Text 3	Option Text 4
What is the full form of MOSFET?	Metal Oxide Semiconductor Field Effect Transistor	Metal Oxide Superconductor Field Effect Transistor	Metal Oxide Semiconductor Field Emission Transistor	Metal Oxide Semiconductor Field Effect Transformer
How many types are there in vertical MOSFET according to the fabrication process?	Four	Three	Two	Five
_____ is p-n junction diode in which the recombination of electrons and holes yields a photon.	Spintronics	Fluxtronics	LED	Photomask
In MOSFET, which terminal is separated by an insulating layer?	Source	Body	Drain	Gate
Which materials are used in semiconductor manufacturing processes, where they are usually used to replace a silicon dioxide?	Low - k dielectrics	High - k dielectrics	Porous	Composite
Electroluminescence is the conversion of _____ into _____ energy.	Light, chemical	Sun energy, electricity	Electrical energy, chemical	Electrical energy, light
Which is the primary factor in achieving high performance microprocessors and memories?	Resistor Scaling	Condensor Scaling	Transistor Scaling	Temperature Scaling
During early 1970, both _____ and _____ noted that the basic MOS transistor structure could be scaled physical dimensions.	Mead, Dennard	Gordon Moore, Intel	Mead, Intel	Moore, Intel

# 12938

Solar cells convert _____ into _____ energy.	Electrical, light	Sun energy, electricity	Sun energy, chemical	Sun energy, sound
Which devices are proposed as a possible device architecture to allow continued scaling along ITRS Roadmap?	Spintronics	Optoelectronics	SETs	Vertical MOSFETs
Which devices are made from solid crystalline materials, that are lighter than metals and heavier than insulators?	Optoelectronics	SET	Spintronics	FET
How many terminals are there in MOSFET?	Five	Two	Three	Four
In MOSFET, when the voltage between transistor gate and source exceeds the threshold voltage, then it is known as which of the following?	Avalanche breakdown	Overdrive voltage	Breaking point	Null point
_____ is controlled by the quantum mechanical effect.	FET	SET	MOSFET	GMR
What is the full form of VLSI?	Very Large System Integration	Very Low System Integration	Very Low Scale Integration	Very Large Scale Integration
Which of the following is not the application of single electron transistors?	Single electron spectroscopy	Grain size detection	Voltage State logics	Quantum computer
As the silicon dioxide is a dielectric material, its structure is equivalent to which of the following?	Resistor	Inductor	Planer capacitor	Zener diode

# 12938

Which is the effect, when the voltage is applied to the leads of the LED, the electrons recombine with the holes within the devices and release energy in the form of photons?	Fluorescence	Cathodoluminescence	Electroluminescence	Phosphorescence
Which is the study of the intrinsic spin of the electron and its associated magnetic moment?	ITRS	Spintronics	Optoelectronics	MOSFET
Which is proposed as possible device architecture to allow continued scaling along the ITRS Roadmap?	FET	Vertical MOSFET	Single Electron Transistors	Optical fibre
Single Electron Transistor is _____ terminal device.	One	Two	Three	Four
Quantum computer is the application of _____.	SET	FET	MOSFET	GMR
Which is the application of MOSFET from the following?	Amplifying or switching electronic signal	Charge state logics	Quantum Computer	Detection of IR Radiation