

大同大學 100 學年度研究所碩士在職班入學考試試題

考試科目:科技英文

所別:通訊工程研究所

第 1/1 頁

註:本次考試 不可以參考自己的書籍及筆記; 不可以使用字典; 不可以使用計算器。

Please translate the following paragraphs into Chinese.

(每題20分)

1. Analog devices or circuits are more sensitive to a variety of design requirements than their digital counterparts. Almost all the analog circuits have to be redesigned or retuned while more advanced technology is to be targeted or ported for the incentives of cost saving or performance improvement.
2. The design of digital systems with VLSI circuits containing millions of transistors and gates is an enormous and formidable task. Systems of this complexity are usually impossible to develop and verify without the assistance of computer-aided design tools, which consist of software programs that support computer-based representations of circuits.
3. Signal processing deals with the representation, transformation, and manipulation of signals and the information the signals contain. For example, we may wish to separate two or more signals that have been combined by some operation, such as addition, multiplication, or convolution, or we may want to enhance some signal component or estimate some parameter of a signal model.
4. Medium access control (MAC) protocols are used in communication networks when multiple users compete for using the same channel. In general, MAC protocols can be divided into two classes: deterministic and random access.
5. The circularly polarized (CP) antenna has often been used in mobile communications. The microstrip antenna can be employed when the bandwidth requirement is low while the slot-ring antenna may be more suitable for operating a wide bandwidth. Though many general techniques can be applied to microstrip-patch and slot-ring antennas to produce circular polarization (CP), the latter usually has more axial-ratio bandwidth than the former.