

# Reference Designation

The key element for developing hardware design partitioning is identifying assemblies and subassemblies using separable parts reference designation letter “A”

Examples:

- 1A12A2R3 - Unit 1, Assembly 12, Sub-assembly 2, Resistor 3
- 1A12A2U3 - Unit 1, Assembly 12, Sub-assembly 2, Inseparable Assembly 3

If you are a subcontractor the unit 1 may not be necessary. It should be the system you are developing in the procurement specification.

## 1 Module

A module is the unit you are developing to meet a specific design in a complex system. This module is part of other modules in a military rack. In this context, the assemblies used to make the delivered module can have one or more subassemblies

## 2 Assembly

An assembly is the next level down from module. It can be a printed circuit assembly, a populated connectorized subassemblies on an aluminum plate that is tested to set parameters before joining to another assembly and then tested to the higher level module parameters.

## 3 Subassembly

A subassembly is a specific function design into one custom package with inputs and outputs. Unlike parts, it contains separable parts inside a package laid out in block to make the assembly work to set parameters. There are companies who provide off-the-shelf parts that can meet the set parameters of an assembly.

## 4 Parts

Parts are inseparable assemblies. Integrated circuits is a good example.