Software and Systems Engineering Vocabulary

block diagram. (1) diagram of a system in which the principal parts or functions are represented by blocks connected by lines that show the relationships of the blocks (ISO/IEC 2382:2015 Information technology -- Vocabulary) (2) diagram of a system, computer, or device in which the principal parts are represented by suitably annotated geometrical figures to show both the functions of the parts and their functional relationships (ISO/IEC/IEEE 24765:2017 Systems and software engineering-Vocabulary) Syn: configuration diagram, system resources chart See also: box diagram, bubble chart, flowchart, graph, input-process-output chart, structure chart

box diagram. (1) control flow diagram consisting of a rectangle that is subdivided to show sequential steps, if-thenelse conditions, repetition, and case conditions (ISO/IEC/IEEE 24765:2017 Systems and software engineering-Vocabulary) Syn: Chapin chart, Nassi-Shneiderman chart See also: block diagram, bubble chart, flowchart, graph, inputprocess-output chart, program structure diagram, structure chart

bubble chart. (1) data flow, data structure, or other diagram in which entities are depicted with circles (bubbles) and relationships are represented by links drawn between the circles (ISO/IEC/IEEE 24765:2017 Systems and software engineering-Vocabulary) See also: block diagram, box diagram, flowchart, graph, input-process-output chart, structure chart

input-process-output (IPO) chart. (1) diagram of a software system or module, consisting of a rectangle on the left listing inputs, a rectangle in the center listing processing steps, a rectangle on the right listing outputs, and arrows connecting inputs to processing steps and processing steps to outputs (ISO/IEC/IEEE 24765:2017 Systems and software engineering-Vocabulary) Note: summarizes the process activities and their inputs and outputs from/to external actors; some inputs are categorized as controls and enablers. Syn: IPO diagram See also: block diagram, box diagram, bubble chart, flowchart, graph, structure chart

flowchart. (1) graphical representation of a process or the step-by-step solution of a problem, using suitably annotated geometric figures connected by flowlines for the purpose of designing or documenting a process or program (ISO/IEC 2382:2015 Information technology -- Vocabulary) (2) graphical representation of the definition, analysis, or method of solution of a problem in which symbols are used to represent operations, data, flow, equipment, etc (ISO 5807:1985) Information processing -- Documentation symbols and conventions for data, program and system flowcharts, program network charts and system resources charts, 3.3) (3) control flow diagram in which suitably annotated geometrical figures are used to represent operations, data, or equipment, and arrows are used to indicate the sequential flow from one to another (ISO/IEC/IEEE 24765:2017 Systems and software engineering-Vocabulary) (4) the depiction in a diagram format of the inputs, process actions, and outputs of one or more processes within a system (A Guide to the Project Management Body of Knowledge (PMBOK(R) Guide) -- Seventh Edition) Syn: flow chart, flow diagram See also: block diagram, box diagram, bubble chart, graph, input-process-output chart, structure chart

FFBD. (1) functional flow block diagram (ISO/IEC/IEEE 24641:2023. Systems and Software engineering--Methods and tools for model-based systems and software engineering, 3.2)

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