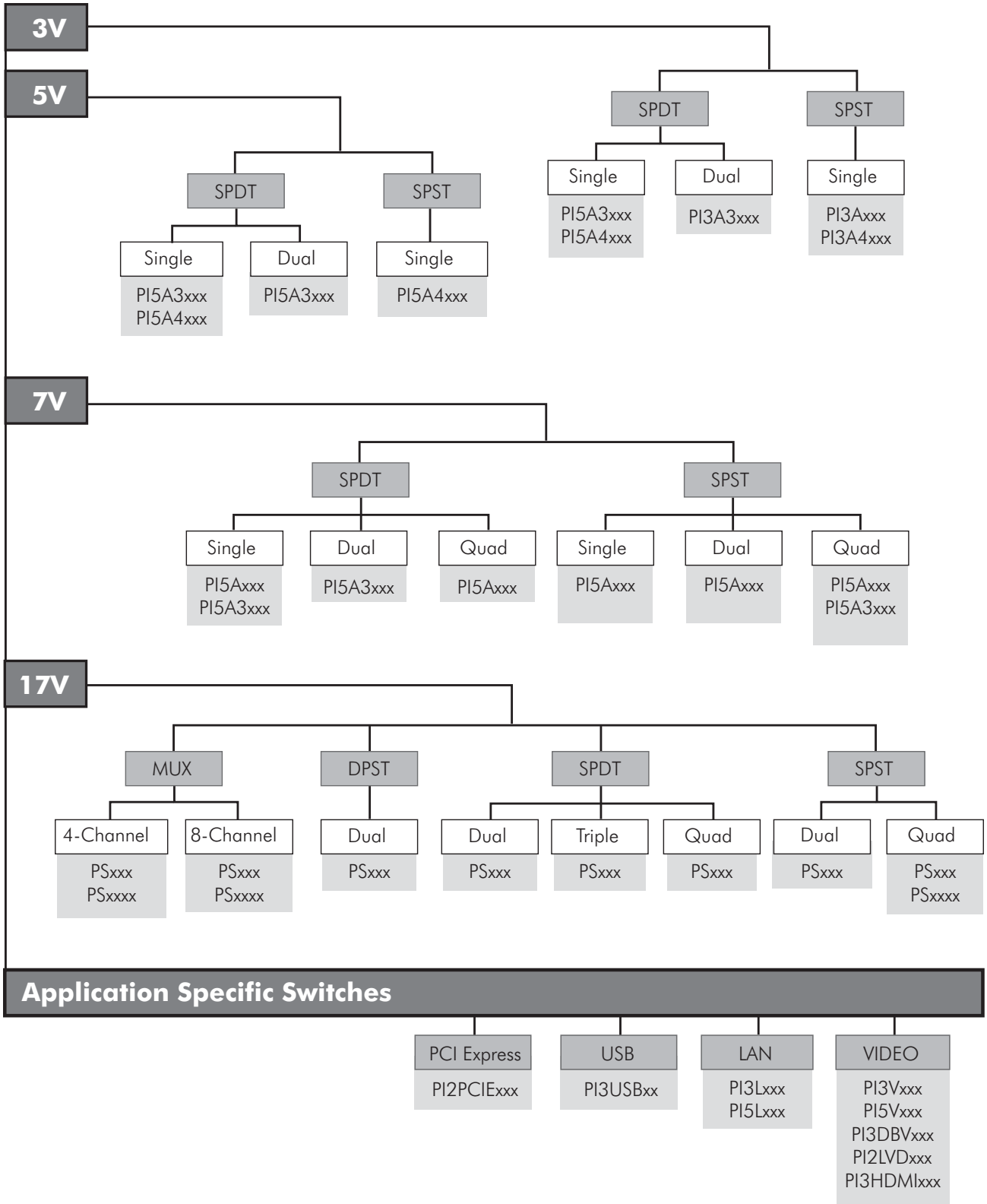ANALOG SWITCH DECISION TREE