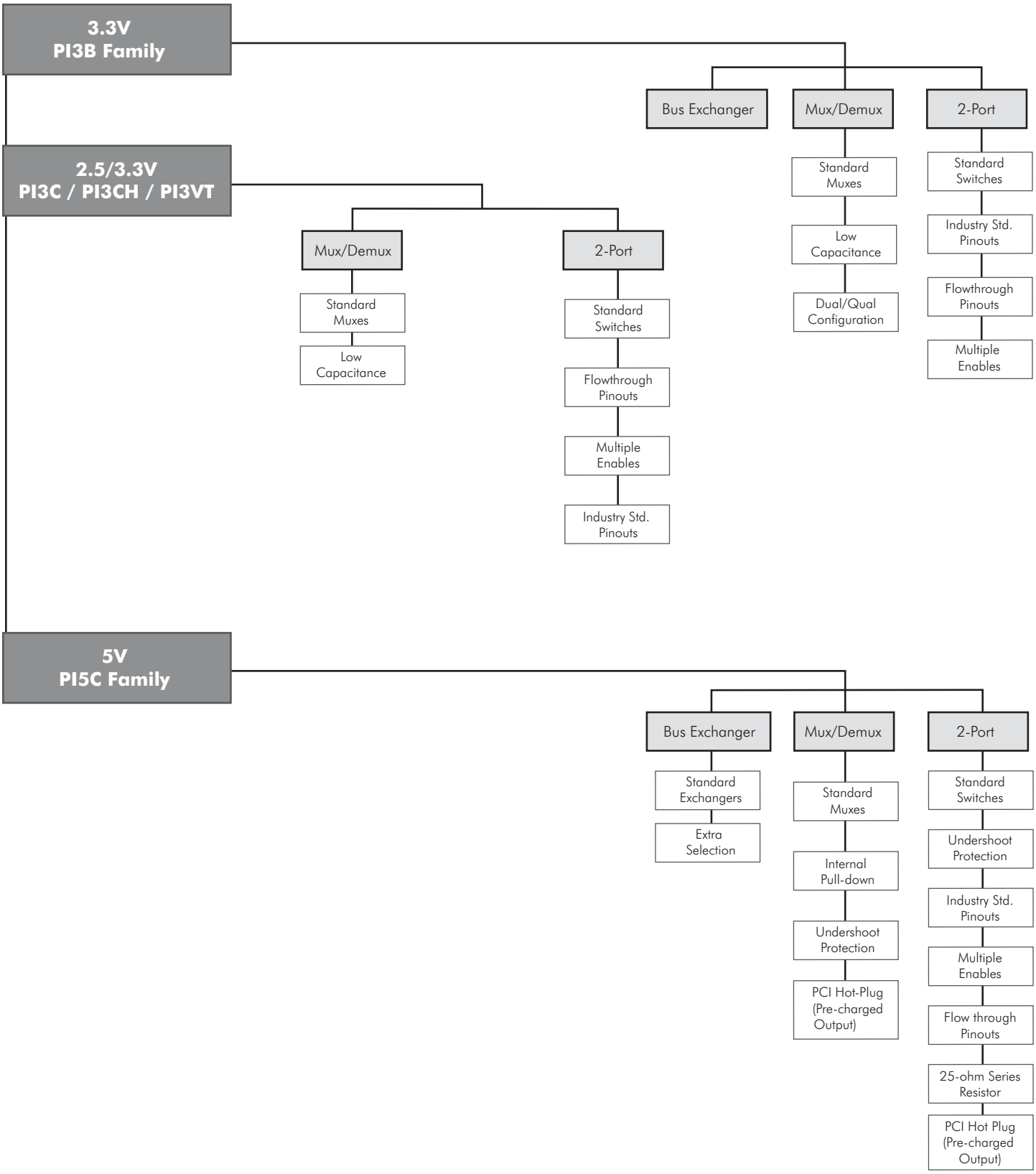DIGITAL BUS SWITCH DECISION TREE