Let us assume that the type of StateCount, Action and State fields is unsigned integer. The initial state is always 0. StateList field is of pointer type and it points to a block whose elements are pointers to a list representing transitions from that state. The following example illustrates the situation:
Automaton:

States: 0, 1, 2, 3
Actions: 1, 2, 3, 4

Data structure for the automaton