referred to as "two medals cherry". When three medals have been bet, if one symbol "Cherry" stops on two activated pay lines, four medals are paid out, which is referred to as "four medals cherry".

[0043] **FIGS. 9 and 10** show circuit configurations arranged on a main control board **61** and a sub-control board **62** for controlling the game processing operation of the slot machine **1** described above.

[0044] The main control board **61** shown in **FIG. 9** has a control unit comprising a microcomputer **63** as its major component, and additionally a circuit for sampling random numbers. The microcomputer **63** comprises a main CPU (central processing unit) **64** for performing control operations in accordance with a preset program, a program ROM (read only memory) **65** served as program storage means, and a backup-capable control RAM (random access memory) **66**. The CPU **64** has connected thereto a clock pulse generator **67** and a frequency divider **68** for generating reference clock pulses, a random number generator **69** for generating a certain range of random numbers, and a random number sampling circuit **70** for specifying one of the generated random numbers. In addition, an I/O port **71** is also connected for communicating signals with peripheral devices (actuators) described below. The ROM **32** has a storage unit divided so as to store a winning probability table, a symbol table, a winning symbol combination table, and a sequence program.

[0045] Principal actuators whose operation is controlled by a control signal from the microcomputer **30** include the stepping motors **45** for rotationally driving the respective reels **2**, **3**, and **4**, various lamps (game operation indicator lamps **13-15**, start lamp **17**, and WIN lamp **19**), various display units (deposited number of game medals display unit **16**, chance LEDs **9-12**, bonus count display unit **18**, number of payout medals display unit **20**), and a hopper **72** for containing medals. These are driven by a motor drive circuit **73**, an individual lamp drive circuit **74**, an individual display unit drive circuit **75**, and a hopper drive circuit **76**, respectively. These drive circuits **73-76** are connected to the CPU **64** via the I/O port **71** of the microcomputer **63**.

[0046] Major input signal generation means for generating input signals required for the microcomputer **63** to produce control signals include an inserted medal sensor **8S** for detecting any medal inserted through the medal insertion slot **8**, a start switch **30S** for detecting any operation of the start lever **30**, the above-described deposited-medal insertion switches **25-27**, and the deposited-medal adjusting switch **29**. In addition, there is a reel position detecting circuit **77** for detecting the rotational position of each reel **2**, **3**, **4** upon receipt of an output pulse signal from the photosensor **49**. The photosensor **49** is included in the driving mechanism of each reel **2-4** and not shown in this figure.

[0047] The reel position detecting circuit **77** counts the number of driving pulses supplied to each stepping motor **45** after the reels **2-4** have started to rotate, and writes these count values to a predetermined area in the RAM **66**. Accordingly, the RAM **66** stores the count value corresponding to the rotational position within a range of one rotational cycle for each reel **2-4**. On the other hand, the photosensor **49** detects the shield plate **50** for each rotational cycle of the reel **2-4** to generate a reset pulse. This reset pulse is applied to the CPU **63** via the reel position detecting circuit **77** and causes the count value of driving pulses counted in the RAM **66** to be cleared to "0". This clear processing eliminates any deviation occurring between the moving display of each symbol and the rotation of each stepping motor **45** for one rotational cycle.

[0048] The input signal generation means described above also includes a reel stop signal circuit **78** for generating a signal for stopping a corresponding reel when any stop button **31**, **32**, **33** is pushed, a medal detection unit **72S** for counting the number of medals paid out of the hopper **72**, and a payout complete signal generation circuit not shown. The payout complete signal generation circuit generates a signal indicating the completion of medal payout when the count value of medals actually paid out inputted from the medal detection unit **72S** reaches the payout amount data represented by the count signal inputted from the display unit drive circuit **75**. Each circuit constituting these input signal generation means is also connected to the CPU **64** via the I/O port **71**.

[0049] To the I/O port **71**, a sub-control unit communication port **79** is connected. The microcomputer **63** delivers a signal to the sub-control board **62** via the sub-control unit communication port **79**. The sub-control board **62** shown in **FIG. 10** is provided with a main control unit communication port **80** for receiving this signal. Communication between the sub-control unit communication port **79** and the main control unit communication port **80** is performed only in one direction from the sub-control unit communication port **79** to the main control unit communication port **80**. In this embodiment, the signal delivered from the sub-control unit communication port **79** to the main control unit communication port **80** is composed of a set of a command type representing its control type in 7-bit length and a parameter representing the content of the command in 8-bit or 24-bit length.

[0050] The sub-control board **62** has a control unit comprising a microcomputer **81** as its major component, and additionally a circuit for sampling random numbers. The microcomputer **81** also comprises, as with the microcomputer **63** in the main control board **61**, a sub-CPU **82** for performing control operations in accordance with a preset program, a program ROM **83** serving as program storage means, and a backup-capable control RAM **84**. The CPU **81** has also connected thereto a clock pulse generator **85** for generating reference clock pulses and a frequency divider **86**. In addition, an I/O port **87** is connected for communicating signals with the main control unit communication port **80** and the actuators described below. The sub-CPU **82** calculates data required to display gaming machine data on the liquid crystal panel **39***d* on the basis of the command transmitted from the main control board **61** for each game, and updates data stored in the control RAM **84** to the data calculated for each game.

[0051] Actuators whose operation is controlled by a control signal from the microcomputer **81** include the reel back lamps **47***a*, **47***b*, and **47***c* embedded in the reels **2-4**, respectively. The lighting of these reel back lamps **47***a*-**47***c* is controlled by a driving signal from a lamp drive circuit **89** connected to the I/O port **87**. In addition, input signal generation means for generating input signals required for the microcomputer **81** to produce control signals include the cross key **23**, A-button **24**, and B-button **25** described above.