[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 **8**S for detecting any medal inserted through the medal insertion slot **8**, a start switch **30**S 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 **72**S 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 **72**S 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. Furthermore, a game status monitoring timer **97** is connected to the I/O port **87**. This timer **97** is set at the time of starting a game by the sub-CPU **82**, and measures an elapsed time since the start of the game.

[0052] An image control IC (integrated circuit) **90** and a sound source IC **91** are also connected to the I/O **87**. The image control IC **90** has connected thereto a character ROM **92** for storing character data and a video RAM **93** serving as