



愛高實業(香港)有限公司  
HICO INDUSTRIAL (HK) LIMITED

**PRODUCT  
SPECIFICATION**

**BLACKJACK**

Product Code:	HCS-G022-0
Version:	1.0
Date:	April 29, 2002

**Hong Kong 香港**

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*Blackjack (HCS-G022-0)*

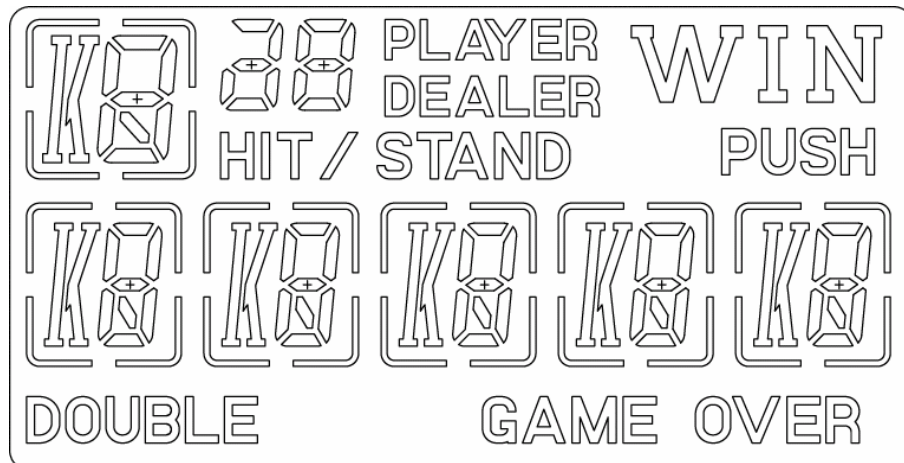
## GENERAL DESCRIPTION

The HCS-G022 is a 4-bit single chip micro-controller that was pre-programmed for a BLACKJACK LCD game. The game is played between the DEALER (computer) and the PLAYER with the goal to achieve a total values of all cards dealt not exceeding 21.

## FEATURES

- Operating voltage: 1.5V
- Played with 5 buttons:
  - ON/DEAL/HIT
  - SOUND
  - DEALER/PLAYER
  - DOUBLE
  - STAND
- Built-in LCD driver directly drive 1/3 bias 1/4 duty 3V LCD.
- Automatically switch off if no key operation for a period of 1-minute.
- Initial score: 400 points
- Maximum score: 9999 points
- Sound effects and melodies:
  - Sound for dealing a card
  - Melody for Lose
  - Melody for Win
  - Melody for Push

## LCD PATTERN





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## KEY DESCRIPTION

BUTTON	FUNCTION
ON/DEAL/HIT	<ul style="list-style-type: none"> <li>▪ Turn on the game while in OFF mode, the game state just before going off will be resumed.</li> <li>▪ Start the game in GAMEOVER mode if the score is 10 or above.</li> <li>▪ Reset score to 400 in GAMEOVER mode if the score is below 10.</li> <li>▪ Deal a card when HIT/STAND indicator is lighted.</li> </ul>
SOUND	<ul style="list-style-type: none"> <li>▪ Press to toggle game sound status. If enabled, sound effects and melodies will be heard.</li> </ul>
PLAYER/DEALER	<ul style="list-style-type: none"> <li>▪ While HIT/STAND indicator is lighted, press and hold to see the DEALER's cards. The PLAYER's cards will be displayed upon the key is released.</li> <li>▪ In GAMEOVER mode, press and hold to see the DEALER's/PLAYER's card. Upon key release, the score display will be resumed.</li> </ul>
DOUBLE	<ul style="list-style-type: none"> <li>▪ When DOUBLE indicator is lighted, press to double the bet and draw one more card.</li> </ul>
STAND	<ul style="list-style-type: none"> <li>▪ While HIT/STAND indicator is lighted, press to stop any more cards being dealt to PLAYER and switch to the DEALER's turn.</li> </ul>

## OPERATING INSTRUCTIONS

1. Right after the batteries are installed, the score is initially set to 400 points. At this time, GAME OVER flashes. The whole system is waiting.
2. PLAYER is the winner as long as his/her total card values is greater than DEALER's. However, PLAYER loses the game when his/her total card value is over 21.
3. The values of the cards 2 to 10 are scored according to their corresponding face values. As for the cards J, Q, K, their values are all scored as 10. The value of the card ACE can be scored either as 1 or 11 depending on the total card values.
4. When the system is waiting and the DEAL key is pressed, 10 points will be deducted from the score to act as the bet. DEALER and PLAYER are dealt 2 cards each on the first turn. One of the DEALER's card will be covered and will only be shown upon the



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PLAYER finished his turn.

5. After the first two cards are dealt, the HIT/STAND indicator will be lighted and wait for the PLAYER decision to deal another card or to end his turn.
6. If the PLAYER's total value on the first two cards are equal to 11, DOUBLE indicator will be lighted.
7. The PLAYER's turn will be ended in one of the following conditions and the DEALER's turn will be started:
  - A. When STAND key is pressed;
  - B. When DOUBLE key is pressed and one card had been dealt;
  - C. When the total values of PLAYER's cards are equal to or exceeding 21;
  - D. When 6 cards had been dealt and DEAL key is pressed again;
8. While in DEALER's turn, cards will be dealt automatically in one of the following conditions:
  - A. PLAYER's total value is not exceeding 21;
  - B. PLAYER's is not a BLACKJACK (i.e. the total value of the first two PLAYER's card is not 21);
  - C. DEALER's total value is less than 17;

## **SCORING SCHEME**

1. 10 unit is awarded when the entire values of PLAYER's and DEALER's cards are the same.
2. 20 unit is awarded when the total value of PLAYER's is greater (but the sum of the card value cannot be over 21) then that of DEALER's. However, 30 is scored in the Double mode.



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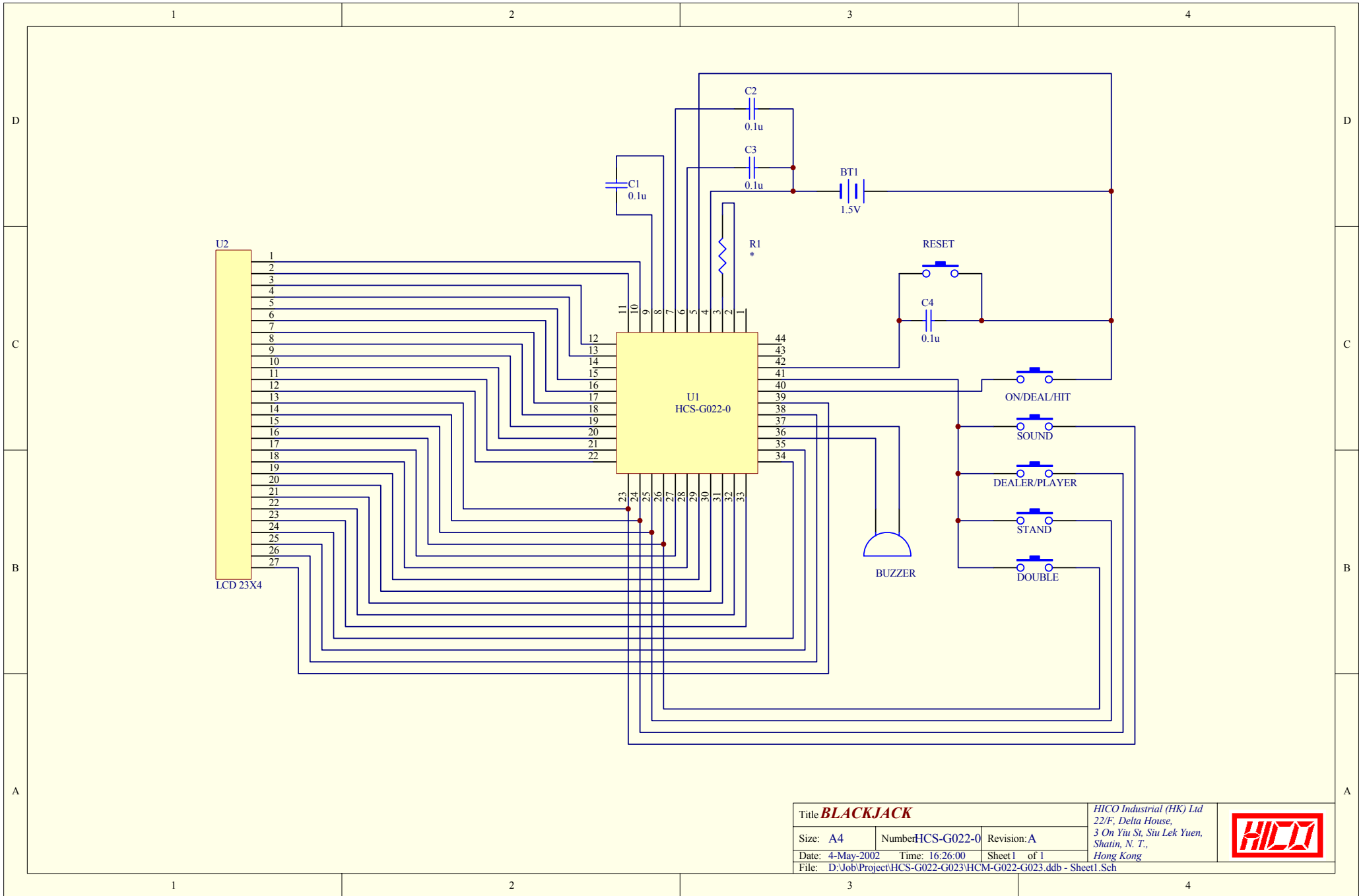
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3. 25 is scored when the sum of PLAYER's two cards is 21. PLAYER gains the score even if the sum of DEALER's two cards is 21 also. However, if the sum of DEALER's 2 cards is 21, and 21 is also the sum of PLAYER's 3 cards or more, DEALER is the winner and gains the score. Finally, if both DELAER and PLAYER have the highest score of 21, and it is the sum of more than 2 cards, the game is a draw.



Title <b>BLACKJACK</b>			HICO Industrial (HK) Ltd 22/F, Delta House, 3 On Yiu St, Siu Lek Yuen, Shatin, N. T., Hong Kong	
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