

GALAGA manual

by Amir Seken and Shaibal Muhtadee

Attribution table:

Student: Fraction of the project:	Amir Seken	Shaibal Muhtadee
HEX display	MR	MR & ED
VGA display	MR	ED
PS/2 Keyboard	ED	MR
Character buffer	MR & ED	MR
Push Buttons	MR & ED	MR
Interrupts	MR	MR

ED - edited and modified

MR - main work and research

Welcome!

ARM Devices used:

I/O ports:

- 1. seven-segment HEX displays**
- 2. VGA pixel buffer**
- 3. PS/2 Keyboard**
- 4. Character buffer**
- 5. Push Buttons**
- 6. Interrupts**

1) Description and Goal

Move the fighter right and left and defend against the suicide attacks of the Galaga aliens by shooting them!
To win, a player has to score at least 1000 points.

2) Controller

KEY3(pushbutton): use to start the game.

Space Button or KEY2: use to fire the fighter's missiles

Left Arrow Key or KEY1: use to move the fighter to the left

Right Arrow Key or KEY0: use to move the fighter to the right

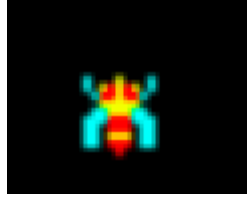
3) Characters

Fighter - Fighter is the spaceship operated by the player. They move to the right and left and can destroy "Galaga" by firing a series of missiles.

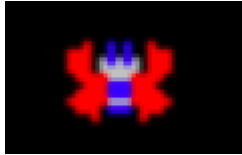


Galaga - The "Galaga" are unknown aliens, which have an insect shape. They fly on the screen and perform suicidal attacks.

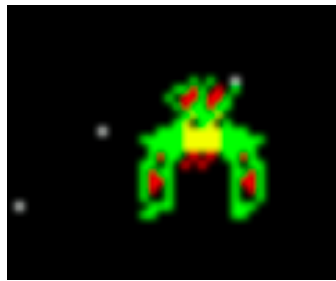
1. Bee alien:



2. Butterfly alien:



3. Galaga boss:



6) Scoring

Score - The player gets points by defeating the "Galaga" by shooting the starship's missiles. Points scored vary depending on the type of the enemy.

1. Bee alien - 80 points
2. Butterfly alien - 60 points
3. Galaga boss - 100 points

5) Game over

If an alien collides with the fighter, the game is over.

If the player reaches at least 1000 points then the game is won.

The player's score is always displayed in the end screen.

Have fun!