

## Technical Specifications

**Team Name: IranFanAvaran**

**. Robot Name: Dara**

**. Number of Degrees Of Freedom: 15**

**. Height: 110 cm**

**. Weight: 9.5 kg**

**. Walking Speed (careful walking): 0.1km/h**

**. Running Speed (fast walking): 0.2 km/h**

**. Actuators Used:**

1. DC geared motor with some changes

Manufacturer: GIL Geared motor

Model: G35GM-656-H20270

Torque: 7NM

Speed: 40 RPM

2. Servo motor,

Manufacturer: Hitec

Model: HS-5245MG

Torque: 5.5 kg.cm @ 6 v

Speed: 0.12/60° sec

3. Servo motor,

Manufacturer: Hitec

Model: HS-65HB

Torque: 2.2 kg.cm @ 6v

Speed: 0.11/60° sec



IranFanAvaran's 3rd Teen Size Robot, year 2008

**. Sensors Used:**

1. CMOS Camera:

Supports a 2Mega Pixel Resolution

2. Potentiometers:

Manufacturer: Bourns, Mexico

Model: 81B1DB20-A13

3. Gyro sensor: ADXRS 401,  $\pm 75^\circ/s$

Manufacturer: Analog Devices

4. Accelerometer: ADXL203,  $\pm 1.7$  g

Manufacturer: Analog Devices

**. Computing Units:**

1. Pocket-PC

Manufacturer: I-MATE

Model: Ultimate 6150

Speed: 520 MHz

2. AVR local processor boards

Manufacturer: IranFanAvaran Robotic Group

Processor: ATmega64 & ATmega8 AVR, Atmel

Speed: 16 MIPS at 16 MHz