Roborace 2013

Contents

- Sponsors
- Purpose of competition
- Teams
- Game rules
- The winner of Roborace 2013
- Gallery

Sponsors

Partners and sponsors of competitions in Chernivtsi became mall "DEPOt" and companies: Goodahead, MagneticOne, network computer shops "Digital World" Nimpha ", newspaper " Molodyj Bukovinets “ “ Chernivtsi National University Y.Fedkovich “ “Association of Robotics”

Громадська організація

АСОЦІАЦІЯ РОБОТОТЕХНІКИ

Purpose of competition

The purpose of "Roborace" is to encourage creative, intellectual, and spiritual development of young people.

Teams

In the third round, take part 21 teams from Ternopil, Lviv, Ivano-Frankivsk, Chernivtsi, Kyiv and Kovrov (Russia).

Mad Cat

SRS

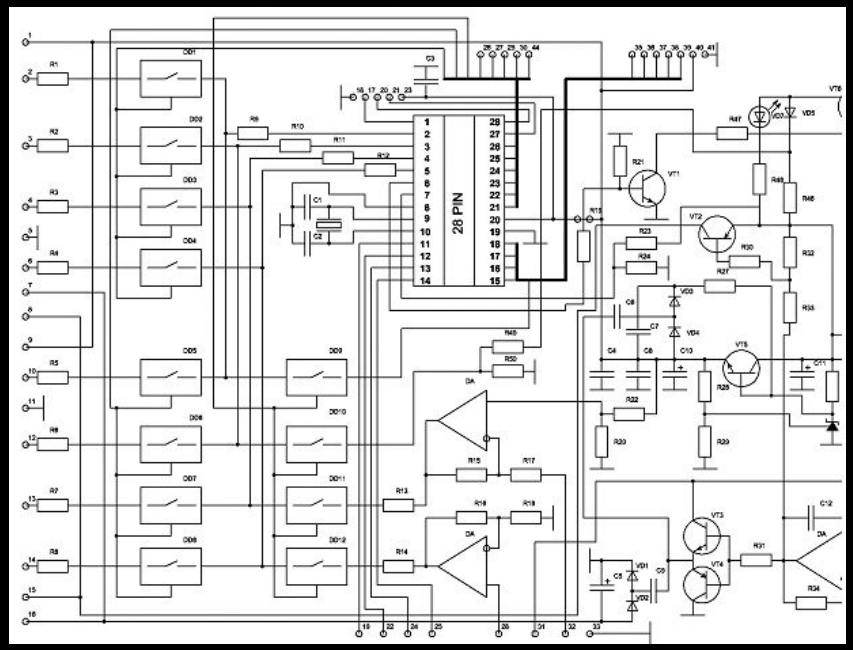
8 bit

Game rules

- Participants should prepare robot, based on ready chassis or develop the new one.
- Teams should equip power subsystem, and “Artificial intelligence", which will manage the movement of machines, to recognize the route, select optimal speed and bypass obstacles.

- Teams develop their own algorithm of the device choose the components and design interaction of these subsystems provide printed circuit board mounting of components involved and the creation of a special software for device management.

```
int main(void)
{
DDRB=0xff;
DDRC=0xff;
DDRD=0x00;

PORTB=0x00;
PORTC=0x00;
PORTD=0xff;

sei();


TCCR0|=(1&lt;&lt;CS00)|(1&lt;&lt;CS01);
TIMSK|=_BV(TOIE0);

SetSpeed(1);

unsigned char i=0;

while(1)
{
vByte=PIND;
if(vSt==0)
if(vByte&amp;1)
{
SetSpeed(1);
vByte=vByte&gt;&gt;1;
//if(vByte&amp;1) TurnLR((vByte&gt;&gt;1),cMovMin); else TurnLR((vByte&gt;&gt;1),0);
TurnLR((vByte&gt;&gt;1),cMovMin);
}
else
{
SetSpeed(0);
vSt=1;
vByte=vByte&gt;&gt;1;
//if(vByte&amp;1) TurnLR(vByte&gt;&gt;1,0); else TurnLR(vByte&gt;&gt;1,0);
TurnLR((vByte&gt;&gt;1),0);
if(PreWhellPos==0) PreWhellPos=WheelPos;
}
else
if(vByte&amp;1)
{
SetSpeed(1);
vSt=0;
PreWhellPos=0;
```



- In the shortest period of time the robot must pass a certain number of laps route.
- Tour winner is the team which took less time for the route.

The winner of Roborace 2013

The winner of the third round of the third season of "Roborace" 2013 was the team TopNode (Ivano-Frankivsk). In second place Robot-711 (Ivano-Frankivsk), the third - Topnode-2 (Ivano-Frankivsk).

Gallery

ROBORACE
www.roborace.te.ua

Thank you for your attention

Thanks Thanks

Thanks Thanks Thank you

Thanks you Thanks Thanks

Thank you