Col\_Counter=0

Row\_Counter=0

Yes

Yes

Is time = 20ms

Col1=output

Col2=output

Col3=output

Row1=output

Row2=output

Row3=output

No

No

Flag=1

Is time = 20ms

Timer start

Is flag =1

(LCD\_Command\_Dir,RS)=1

(LCD\_Command\_Dir,RW)=1

(LCD\_Command\_Dir,EN)=1

LCD\_data\_dir=0xff

Flage=0

Start

Yes

Send\_command(8\_bit\_mode)

Send\_command(Cursor\_off)

Send\_command(Cursor\_shift\_rgiht)

Send\_commandClear\_screen)

Send\_command(Home\_position)

No

Send\_char(BottonArr [Row\_counter][Col\_Counter]

Yes

Pressed\_key=Botton\_Arr[Row\_Counter] [Col\_Counter]

Yes

Col\_Array[Col\_counter]=high

No

No

Row\_counter++

Is Row\_Counter =3?

Is Row\_Arr[Row\_counter]= low?

Col\_Arr[Col\_counter]=Low

Yes

Is time = 20ms

Col\_counter=0

Row\_counter=0

Yes

No

Is time = 20ms