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On The Integration For The Electronic Trend of Tatical Graphics

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ABSTRACT:-

Currently, many scientists believe in the fact that electronics as a vast modern discipline needs relevant tools and tactics to develop its already living systems. This tec-hnical note contains an everywhere path for the development of computing artificial in-telligence techniques,software design and database descriptions mark the human needs for a Varity of computing functions: (a) among which training and testing knowledge of tactical situations. (b) Better planning and decision for planning situations interfacing tac-tical artificial intelligent systems. (d) Providing an experiment for studding tactical deci-sion making. In fact, this studying aims at answering some queries found in the above question like what can architects in electronics provide in tactical graphics ? This humble research paper is being undertaken to give a workable answer to some or part of these queries found in the area of electronics which is hoped to be reliable source within varie- ty of computing fields. It will provide an acceptable answer to what is being asked about integration between soft and hardware made to develop tactical graphics in electronic. It has become now possible for thr designer to connect the personal computer (Buses) with any outside apparatus by means of designing a suitable card(ADAPTER)fixed on the (EXPANSION SLOT).

Thus , the primary aim of this study is to develop reprogrammable and prototype boards aiming producing some reliable features suitable for final use graphic cards.

الطرق الالكترونية للتكتيك الرسم الفوتوغرافي

الملخص

يهدف البحث إلى إيجاد السبل الكفيلة لمساعدة التقنيات المرتبطة للالكترونيات ففي ميدان البرمجة و الوصف التصميمي يحتاج العاملون إلى أنواع متعددة من البرمجيات الوظيفية التي يناط بها تشغيل النظم الالكترونية كوحدة أدائية فمن هذه الوظائف معلومات كافية في التدريب ولتقويم لمجمل الحالات التكتيكية و التطور الأمثل للتخطيط و التصميم والربط المتكامل للأساليب الذكاء بأنواعه وتوفير الخطوات البحثية من اجل دراسة إي قرار تكتيكي يعول به 0وعليه تم بناء بورد متكامل يضاف إلى إحدى فتحات لوحة إلام (Slot) ليقوم برسم تكتيكي من الحاسوب إلى (.OSC) استخدمت لوحة إلام من نوع (XT) ولغة الحاسوب (Assembly).

INTRODUCTION:

The great role of our age of information has had its clear impact on the modern immense development in the technology of computer , in the fact that electronics as a modern discipline engaged the development of relevant tools and tactical to insure and facilitate the role and use of its living systems. This role is not limited only to introduce-ing computer systems and their programs rather than the programming language state-ment rules and drawing design programs. We believe that the a above note contains an everywhere path for the development of computing artificial intelligence technique and designs. Many of which are invested in administration to establish devices of shop-ping propaganda and advertisement , which have been enlarged to become greater in the industria , scientific and technological fields. It seams that such important role is rather neglected by us—the Arabs. The economical sector and the industrial section occupy a vital part in the ability of computer technology since they are directly connect-ed with the control system, statements resulting from measurements process and adjustment.

Software design and data based descriptions mark the human needs for a variety of computing functions such as training and testing knowledge for tactical situations, bet-ter planning decisions interfacing tactical artificial intelligent systems and providing pro-totype experiment for studying tactical decision making. Yet their astonishing develop-ment and surprising performance together with their wide spread,made them a proper model choice in this vast area of knowledge.

Here lies the important of this humble study. We consider it as an encouraging beginning concerning the suitability of computing cards design, since it does not repre-sent a clue for setting up controlling systems . It is considered as a try to join the per-sonal computer with the outside surrounding atmosphere with the hope to be a suit-abl guide the university students to set up or form some advantageous controlling system for their own purpose during their study of tactical design.

AIM OF THE PAPER:-

The primary aim of this paper to answer the question of what can architects, electro-nics and computers offer to people with vision impairments. In fact,this question in-cludes immense roles of the endless information available in these days and the not-iceable development in the technology of computers , which are not only made to in-troduce operating systems and

their feeding programs like,but are originally utilized to develop different types of administration in human activities made in relevance to shopping , propaganda advertisement and the like.

Wolf (Ibid) and nutt (Ibid) believe that the above roles and have been greatly in large to include scientific industrial and vast technological fields . Yet science and engineering have been greatly developed the invention of computing devices , which will help scientists and research students to collect,manipulate and interpret relevant data with much greater speed , accuracy and precision.

Here lies the importance of this paper with its remarkable aim in this study to enc-ourage a start concerning suitable cards design . Humbly speaking,this research paper isn't made to present a noticeable process for setting up sophisticated controlling desi-gn or watching systems for we consider it a try to join the personal computer with the outside hum-an activities . In the same tim ,a tactical graphics study (TGS)that makes a design tactical source hardware \ architecture and standard for graphics card leading primarily for targeting free software\ source operating system . Hence , this study will be developing programmable and prototype boards aiming at producing some notice-able featured and end _user graphics cards.

PROCEDURAL METHODOLOGY:- EXPERIMENTAL:-

Katz(1989) discusses the graphic tactic to enhance the architectures for hight perfor-mance computing. Kuose and Rose (2005)describe ways to improve an accurate perfo-rmance model.

The procedural methodology and function of the circuit relevantly used in this paper is mainly based on the processes of conversion of digital signal provided by the computer into analog signal used widely within industrial application. Thus,all compon-ents of the procedural principle are built on the cards known as XT board in order to facilitate the connection. This card is composed from 62 pins basically of 31 pins devot-ed to transfer or to achieve the communication between the computer and the card . the path way used in the computer is of the type ISA (Instruction Set Architecture). It is one of the adequate methods known to be used in connection and communication.

DISCUSSION AND IMPLEMENTATIO:-EXPERMENTIAL

It is realized that the adequacy of the procedural methods need the following componential units:- U1 and U2 (74lS244,OCTAL BUFFERS)are needed to accomplish a

protection circuit between the input and output represented by the computer concer-ning the output of data to the card. U1 and U2 are considered as the component of the circuit which are made of three case buffers.The interface buffering require several add-itional integrated circuit (ICS) to be added to the circuit load of computer, this method is hope to eliminate any potential problem from far out which is measure of the number of logical gate inputs driven by the current from a signal gate output, using three 74LS244s chips to improve both the performance and density for three state memory of address, clock and bus oriented receivers and transmitters. They are consist of(20) pins for each. pin(1)and(2)represent the enabling concerning buffer U1.pin(10) represent the ground , pin (20) is Vcc, the remain of pins are fundamental ling functioning as input of the add-resses from A3-A9,as well as the signal enabling (AEN). Besides ,U2 function is to rep-resent buffer of the addresses from A0, A1 and A2 on the pin(13,15 and 17)respectively. In addition, the signal LOW is connecting to pin(2) and LOW connect to pin(4) , beside other unused signal.

U3(74LS245,OCTAL TRANSCEIVERS) Rrepresents a buffer ascribed by two directions (asynchronous bidirectional buffering for eight data lines). Data is realized as the infor- mation which can be transferred from the computer to the card and vice versa function. Therefore, pin (1) and (19) are supposed to enable the processes of both reading and writing. U4 and U5(74LS337,LATCH WITH 3-STAGE OUTPUT) are electronic circuit used to store the data for certain period of time ,and these circuit are made to digital (D) flip- flops (IC) where each of them contains (8) D flip flops has a special function to store one bit of data. They are contain buffers for input/output data from latch to D/A converter. The function of this latch has to suitable enough to enable the process of making the output data,represented by pin(11)within U4 and U5. Two latches used in here are used to represent one of the two axis for each i.e one for x-axis and the other y-axis. Whereas the enabling signal is taken from U8 which is functioning as a decoder to the relevant addresses coming from the three input to 8 input (Y0-------Y7). Infact,the above pro-cessing try is made to solve one of the serious problems faced the research. Since, it is found that above design card will of the main card , thus ,the decorder is used to ignite the latch after inserting it on (NOT) gate , where the output decoder is LOW and the enabling of latch is HIGH , hence , one of primary problems we faced during the preli-minary operation of this cct. Pin(14)and(15) from U8 hold the following addresses(318 and 319). These two addresses are found to enter the (OR)gate,where each one of them allows entering a gate with the addition 0 signal LOW. For we are using the processes of reading only U8 (74LS138,DECODER) is made to operate directly via two different signals. The first signal is realized to take the addresses(A3 and A4)which enter to a bin-ary input (AND) gate.

Therefore ,the output of the gate goes to pin 6 within U8. The second signal take the addresses (A5,A6,A7,A8 , A9 and AEN) , which represent the out- put of U1. Thus, the use of gate NOT , AND , will help to the output of the gate.Hence, the process of writing is achieved by this output representing the second pin of the enabling decoder as well as the enabling of U3 to achieve the process of writing. For the functional operations of U6 and U7 (Zn 423,DIGTAL TO ANALOGE)all the data sent from the computer to the latch are seen in the form of digital entities and in order to convert these into analog signals U6 and U7 made to operate adequately. Hence, these function as the circuit of conversion of the digital signals to analogs to operate with the capacity of 8 bit input concerning the complete circuit. On the other hand, the output is realized on pin 5 from IC circuit. Accordingly, we easily get two different signal conver-ted from digital form into analog signals. The output circuit is directly connected to OSC. which has the capable function,which display the analogue signals in additional to proper measuring of their amplitude added to the measuring of the time factor using the validity of axis as well as capabilities. Finally, a kind of assembly language is needed to achieve the communication between card and the processor inside the computation. It is feasible to react here the output of any generator may not make sense to observers, although , it my illustrate a proper consistent syntax to the keen architecture to produce it, since diff-erent output may be initiated at different times by a definite stimulus. In this days, the set of all output sentences is called assembly which can be generated by the automa-tion. This kind of machine operative function can be touched and verified by some other future researches. This study is short enough to include such advanced knowledge pro-perly.It is observed that such a language is quick though to obtain the execution and due to this speed, it is used for the purpose of graphics on OSC.Therefore ,this research paper will utilize many application programs by this language.

PROGRAMMAR ONE:

This program is display the name of the **GOD** on the OSC in Arabic Languages (الله)

```
148D:0100 MOV DX,0319
148D:0103 MOV AL,25
148D:0105 OUT DX,AL
148D:0106 DEC DX
148D:0107 MOV  AL,80
148D:0109 OUT  DX,AL
148D:011A DEC AL
148D:010C JUZ 109
148D:010E MOV DX,0319
148D:0131 OUT DX,AL
148D:0132 DEC  AL
148D:0134 JNZ 0131
148D:0136 MOV AL, FF
148D:0138 INC DX
148D:0139 OUT DX,AL
148D:013A DEC DX
148D:013B MOV AL,FF
148D:013D OUT DX,AL
```

148D:0111 OUT DX,AL
148D:0112 DEC DX
148D:0113 MOV AL,80
148D:0115 OUT DX,AL
148D:0116 DEC AL
148D:0118 JUZ 0115
148D:011A MOV AL, 80
148D:011C MOV DX,0319
148D:011F OUT DX,AL
148D:0120 DEC DX
148D:0121 MOV AL,FF
148D:0123 OUT DX,AL
148D:0124 DEC AL
148D:0126 JNZ 0123
148D:0128 MOV AL,C0
148D:012A MOV DX,0319
148D:012D OUT DX,AL
148D:012E DEC DX
148D:012F MOV AL,FF
148D:013E DEC AL
148D:0140 JUN 013D
148D:0142MOV DX,0318
148D:0145 MOV AL,00
148D:0147 OUT DX,AL
148D:0148 INC DX
148D:0149 MOV AL,CO
148D:014B OUT DX,AL
148D:014C DEC AL
148D:014E JNZ 014B
148D:0150 MOV DX,0318
148D:0153 MOV AL,80
148D:0155 OUT DX,AL
148D:0156 INC DX
148D:0157 MOV AL,25
148D:0159 OUT DX,AL
148D:015A DEC AL
148D:015C JNZ 0159
148D:015E JMP 100

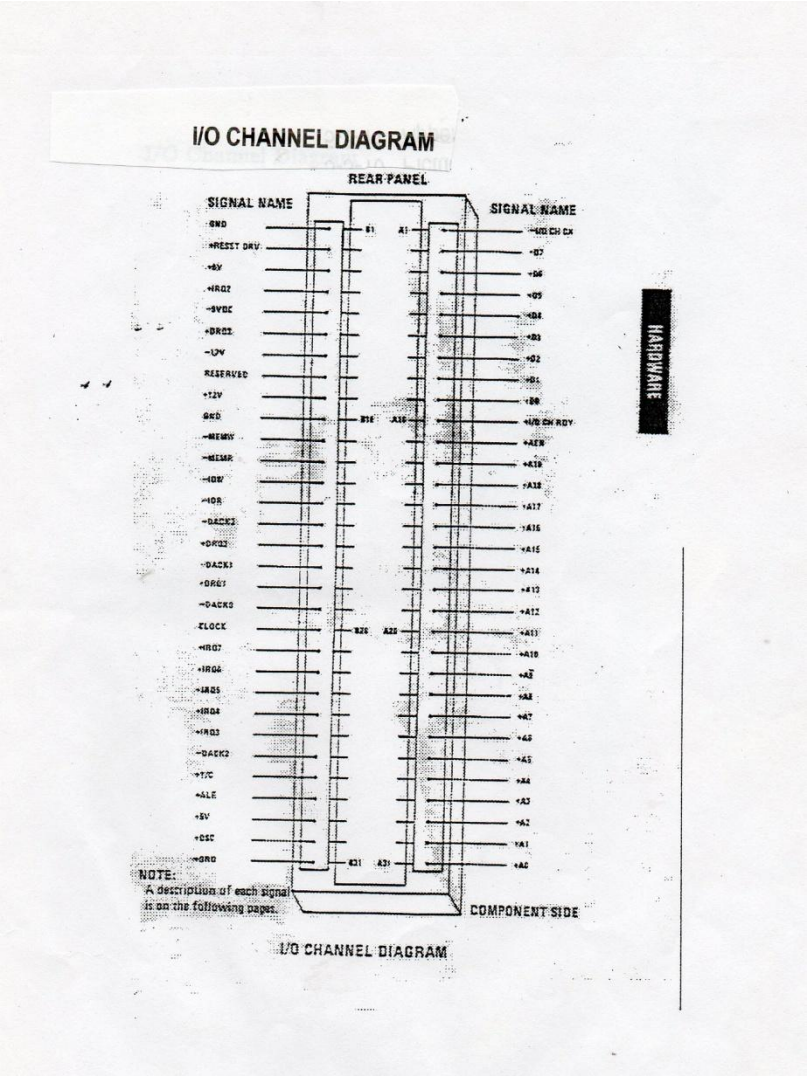
The execution of this program , we get this picture in OSC.

CONCLUSION:-

It is quite evident that we have had neglected the vital role of the immense develop-ment in the technology of computer especially in the industrial and other technological fields. In this days it becomes possible for the designers to connect the personal com-puters with some outside apparatus by means of integrating a suitable adapters which can be fixed in the expansion slot.

The path way is of the type ISA. It is one of the adequate methods know to be used in connection and communication. A buffering system is accomplishable using 74LS244 chips and line drivers with three state output to provide a uni-directional buffering for sixteen computer lines to reach for an adequate assembly language which is needed to achieve the communication between the card and the processor inside computer.

It is found that the output of any generator used here is quite feasible to illustrate a different



I/O CHANNEL DIAGRAM

times by different stimulate. Those veritiedprocesses helped to reads for an assembly language generated by the automation ,ready to be used whenever it is needed as it is exhibited clearly in this paper.

Finally, it is observed the the assembly language reached at by this research is quickly of which is hoped to be uitilized within the application verified programs.

Moreover, this study is highly restricted to include some other advanced properties and knowledge which can be the trends for future research in this field using three(x-y-z) dimension.

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