



701 Brooks Ave South,
PO Box 677
Thief River Falls, MN 56701-0677
USA

www.digikey.com
Global Customer Support
1-800-344-4539 or 218-681-6674

PO Acknowledgement 89222550
USD \$

Bill To:
TX A&M UNIVERSITY
ACCOUNTS PAYABLE/ELECTRICAL & COMPUTER
3128 TAMU
COLLEGE STA TX 77843-3128
USA

Buyer:
LANITA JACKSON
TX A&M UNIVERSITY
WISENBAKER ENGINEERING BLDG RM 076
COLLEGE STATION TX 77843-3128
USA

Ship To:
RYAN REGAN (CAPSTONE)
TEXAS A&M UNIVERSITY ELECT & COMP ENG
3128
188 BIZZELL ST
WEB BLDG ROOM 076
COLLEGE STATION TX 77843-3128
USA

Ship From:
DIGI-KEY ELECTRONICS
701 BROOKS AVE. SOUTH
P.O. BOX 677
THIEF RIVER FALLS MN 56701-0677

Purchase Order: 02-460004 00000
Account: 2915601
Customer: 12598339
Payment Terms: Net 30 Days
Shipping Method: FedEx Ground
Order Source: INTERNET
Order Date: 16-OCT-2024
Estimated Release Date: 16-OCT-2024/AUTO

Line Item	Ordered	Available Qty	Backordered Qty	Item Number/ Description		Unit Price USD \$	Amount USD \$
1	6	6	0	PART: 516-1609-5-ND MFG : AVAGO TECHNOLOGIES US INC / HCNR201-300E COO : THAILAND ROHS3 COMP REACH UNAFFECTED 10-JUN-2022	DESC: OPTOISO 5KV LINEAR PHVOLT 8DIPGW ECCN: EAR99 HTSUS: 8541.49.8000	5.83000	34.98
2	2	0	2	PART: VUE75-06N07-ND MFG : IXYS / VUE75-06N07 COO : GERMANY ROHS3 COMP REACH UNAFFECTED 17-JAN-2022	DESC: BRIDGE RECT 3P 600V 86A ECO-PAC1 ECCN: EAR99 HTSUS: 8541.10.0080	19.27000	38.54
3	1	1	0	PART: IKCM30F60GDXKMA1-ND MFG : INFINEON TECHNOLOGIES / IKCM30F60GDXKMA1 COO : MALAYSIA ROHS3 COMP REACH UNAFFECTED 17-JAN-2023	DESC: IFPS MODULE 600V 30A 24PWRDIP ECCN: EAR99 HTSUS: 8542.39.0060	21.04000	21.04
4	6	6	0	PART: MAX4080SASA+-ND MFG : MAXIM INTEGRATED / MAX4080SASA+ COO : THAILAND ROHS3 COMP REACH UNAFFECTED 14-JUN-2023	DESC: IC CURRENT SENSE 1 CIRCUIT 8SOIC ECCN: EAR99 HTSUS: 8542.33.0001	5.59000	33.54



701 Brooks Ave South,
PO Box 677
Thief River Falls, MN 56701-0677
USA

www.digikey.com
Global Customer Support
1-800-344-4539 or 218-681-6674

PO Acknowledgement 89222550
USD \$

Line Item	Ordered	Available Qty	Backordered Qty	Item Number/ Description	Unit Price USD \$	Amount USD \$
5	6	6	0	PART: 336-2057-5-ND DESC: DGTL ISO 5000VRMS 1CH 6P 16S0IC MFG : SKYWORKS SOLUTIONS INC / SI8610BD-B-IS COO : TAIWAN, PROVINCE OF CHINA ECCN: EAR99 HTSUS: 8542.39.0060 ROHS3 COMP REACH UNAFFECTED 14-JUN-2023	4.04000	24.24

Sales Amount	152.34
Shipping charges applied	6.99
Total	159.33
USD \$	

General - WEB ORDER ID: 351438811

From: [Ryan Regan](#)
To: [ECEN Business Office](#)
Subject: ECEN 403-903 VFD Motor Control Group Order Request
Date: Tuesday, October 15, 2024 6:37:13 PM
Attachments: [Budget 3.xlsx](#)
[Texas A&M University Mail - VFD Motor Control Firmware Subsystem Introduction Project.pdf](#)

Digikey Cart: <https://www.digikey.com/short/trd5wqq7>

Mouser Cart: <https://www.mouser.com/ProjectManager/ProjectDetail.aspx?AccessID=75c85def79>

Amazon Wishlist: https://www.amazon.com/dp/B0CBZ91R5J/?coliid=IEB0MSIMFMLYM&colid=H84NHAVCHYF0&psc=1&ref_=cm_sw_r_cp_ud_lstpd_H7MR95RFBQEG08KH3FDP

--

Ryan Regan
ryan13516@tamu.edu
C: (904) 806-6884
UIN: 730000003



Ryan Regan <ryan13516@tamu.edu>

VFD Motor Control Firmware Subsystem Introduction Project

7 messages

Ryan Regan <ryan13516@tamu.edu>

Tue, Oct 15, 2024 at 3:27 PM

To: Shima Hasanpour <shimahasanpour@tamu.edu>

Cc: John Lusher <john.lusher@tamu.edu>

Howdy,

I was just in my ECEN403-903 lab with you and was unable to present my subsystem introduction project because my group had not ordered our development board yet. I was unable to get my code working on the different development board that we found in the cage, so I plan to present it to Dr. Lusher on Friday during the Blitz meeting. He told me this morning that this would be fine after I showed him the work that I had done besides the intro project.

Is my group approved to place the order on the items listed in the sheet that we sent you last weekend? I'll attach it to this email thread as well for your reference.

Thanks,

Ryan Reganryan13516@tamu.edu

C: (904) 806-6884

UIN: 730000003

**Budget.xlsx**

23K

John Lusher <john.lusher@tamu.edu>

Tue, Oct 15, 2024 at 3:35 PM

To: Ryan Regan <ryan13516@tamu.edu>, Shima Hasanpour <shimahasanpour@tamu.edu>

What is the TTL-232R-5V-PCB being used for? Getting a USB to serial cable is ok, but this is one, not a cable, and two, not the correct voltage of the MCU, which is 3.3VDC. You all need to pay attention to voltage levels!

John

From: Ryan Regan <ryan13516@tamu.edu>**Sent:** Tuesday, October 15, 2024 3:27 PM**To:** Shima Hasanpour <shimahasanpour@tamu.edu>**Cc:** John Lusher <john.lusher@tamu.edu>**Subject:** VFD Motor Control Firmware Subsystem Introduction Project

[Quoted text hidden]

John Lusher <john.lusher@tamu.edu>

Tue, Oct 15, 2024 at 3:36 PM

To: Ryan Regan <ryan13516@tamu.edu>, Shima Hasanpour <shimahasanpour@tamu.edu>

This would be more logical:

<https://www.digikey.com/en/products/detail/ftdi-future-technology-devices-international-ltd/TTL-232R-RPI/4382044>

John

From: John Lusher <john.lusher@tamu.edu>

Sent: Tuesday, October 15, 2024 3:35 PM

To: Ryan Regan <ryan13516@tamu.edu>; Shima Hasanpour <shimahasanpour@tamu.edu>

Subject: Re: VFD Motor Control Firmware Subsystem Introduction Project

[Quoted text hidden]

John Lusher <john.lusher@tamu.edu>

Tue, Oct 15, 2024 at 3:37 PM

To: Ryan Regan <ryan13516@tamu.edu>, Shima Hasanpour <shimahasanpour@tamu.edu>

Make sure to get the dev kit order today:

That line item is approved for sure, and it is from Mouser.

<https://www.mouser.com/ProductDetail/Microchip-Technology/DM330030?qs=mAH9sUMRCttpKwFgVpiwdw%3D%3D>

John

From: John Lusher <john.lusher@tamu.edu>

Sent: Tuesday, October 15, 2024 3:36 PM

[Quoted text hidden]

[Quoted text hidden]

Ryan Regan <ryan13516@tamu.edu>

Tue, Oct 15, 2024 at 3:41 PM

To: John Lusher <john.lusher@tamu.edu>

Cc: Shima Hasanpour <shimahasanpour@tamu.edu>

Thanks, I'll send the order in for the development board as soon as possible.

The UART to USB is a mistake I need to take it off, when I put it on there I didn't understand how the UART portion of the dev board worked or what it did. Let me send you an updated sheet, apologies for the confusion.

Ryan Regan

ryan13516@tamu.edu

C: (904) 806-6884

UIN: 730000003

[Quoted text hidden]

 **Budget.xlsx**
23K

Ryan Regan <ryan13516@tamu.edu>

Tue, Oct 15, 2024 at 4:00 PM

To: John Lusher <john.lusher@tamu.edu>

Cc: Shima Hasanpour <shimahasanpour@tamu.edu>

Wrong attachment, here is the updated version:

Ryan Regan

ryan13516@tamu.edu

C: (904) 806-6884

UIN: 730000003

[Quoted text hidden]

2 attachments

 **Budget 3.xlsx**
23K

 **Budget.xlsx**
23K

Shima Hasanpour <shimahasanpour@tamu.edu>
To: Ryan Regan <ryan13516@tamu.edu>
Cc: John Lusher <john.lusher@tamu.edu>

Tue, Oct 15, 2024 at 4:08 PM

approved.

[Quoted text hidden]

--

Best Regards

Shima Hasanpour; Ph.D. Student

Advanced Electric Machines & Power Electronics (EMPE) Lab.

Texas A&M University