Avnet Digital ExperienceProduct API



Contents

1.	Introduction	3
2.	Tokens required for Product API	3
3.	Product API	3
3.1.	Endpoint and Protocol	4
3.2.	Header	4
3.3.	Input Parameters	4
3.4.	Output Parameters	6
3.5.	Status Codes and Messages	11
3.6.	Sample Request and Response	12
4.	Accessing Avnet API with Postman	14
5	Sample code/examples to access Avnet API	18



1. Introduction

Avnet product API provides the product Information to Avnet Digital Experience customers for the specific search term/product name /part number provided. The information includes details on different product attributes (standard and technical), pricing, documents etc.

Note:

All Avnet APIs only support TLS v1.2 protocol.

2. Customer Specific Tokens required for Product API

The following are the never expire tokens which need to be passed while calling the product API in the header. These tokens will be provided during onboarding.

Mandatory Tokens for all requests

Ocp-Apim-Subscription-Key

Optional Tokens

The below tokens need to be passed to get customer account specific pricing information. The tokens are optional, if not provided in the request, generic web pricing will be provided in the response.

WCToken

WCTrustedToken

3. Product API

Product API can be accessed as a guest user or as a registered user in digital portal. In order to retrieve the account specific information like price (award pricing, contract pricing etc.), the 'WCToken' and 'WCTrustedToken' mentioned above must be passed in the header of product API. If the above tokens are not passed in header, the guest pricing will be listed.

Product Search can also be performed by providing multiple CATENTRYID / MFPARTNUMBER/ CUSTOMERPARTNUMBER (maximum of 25 parts)



3.1. Endpoint and Protocol

Environment	End point	Protocol	HTTP Method
TEST	https://apigw.avnet.com/external/getDEXFetchProductsDemo	HTTPS	GET
PROD	https://apigw.avnet.com/external/getDEXFetchProducts	HTTPS	GET

3.2. Header

Sl.No	Field Name	Data Type	Possible Values	Parameter Type	Required/ Optional	Field Description
1	Ocp-Apim- Subscription-Key	String		Header	Required	API Key to be used as header data using the AVNET subscription Ids provided during onboarding.
2	Accept	String	application/json	Header	Required	
3	WCToken	String		Header	Optional	Tokens shared during onboarding
4	WCTrustedToken	String		Header	Optional	Tokens shared during onboarding

3.3. Input Parameters

This section provides information about the parameters that need to be sent while invoking the product API service.

Sl.No	Field Name	Data	Possible Values	Parameter	Required/	Field Description
1	STORE_ID	Integer	10151, 715839035, 715839038	Request	Optional Required	Region specific store id(case sensitive) Americas – 715839035 ASIA – 715839038 EMEA – 10151
2	pageNum	Integer		Request	Optional	Default is 1
3	pageSize	Integer		Request	Optional	Default is 5 Max size is 200
4	acctNum	string		Request	Optional	SoldTo Account Number
5	searchType	string	ERPPARTNUMBER, MFPARTNUMBER, CATENTRYID, KEYWORD, SUPPLIERPARTNUMBER,	Request	Required	Pass one of the possible values



			CUSTOMERPARTNUMBER, MDMMATERIALNUMBER			
6	searchTerm	String		Request	Required	The term which needs to be searched and details to be fetched for. It should be in line with the searchType specified. For searchTypes CATENTRYID and MFPARTNUMBER, multiple values are supported, separated by (upto 25 parts)
7	infoLevel	String	SUMMARY, WITHATTR, COMPLETE	Request	Required	SUMMARY – Basic information WITHATTR – Technical attributes will be fetched. COMPLETE – Everything including assets will be fetched.
8	langld	String	-1,-7	Request	Optional	Default value is English1 = English -7 = Chinese
9	Currency	String		Request	Optional	Any currency supported by the region can be sent in the request. Default value varies based on region (Given below) EMA – USD ASIA – USD EMEA – EUR
10	inStock	String	true, false	Request	Optional	
11	rohsCompliance Code	String	'Y', 'N', 'E'	Request	Optional	Y – Yes N – No E – Exempt
12	newProductFlag	String	Y', 'N'	Request	Optional	
13	obsoleteFlag	String	Yes, No	Request	Optional	
14	endOfLife	String	Yes, No	Request	Optional	
15	leadFree	String	Yes, No	Request	Optional	



3.4. Output Parameters

This section provides information about the possible parameters that can be present in the response.

Sr.No	Field Name	Data Type	Possible Values	Field Description	Applicable Info Level
1	recordSetTotal	String	" recordSetTotal ": "1"	Number of search results	SUMMARY/WITHATTR/COMPLETE
2	pageNum	String	"pageNum": "1"	Current page number	SUMMARY/WITHATTR/COMPLETE
3	pageSize	String	"pageSize": "5"	Number of results present in current page	SUMMARY/WITHATTR/COMPLETE
4	language	Integ er	"language": -1,		SUMMARY/WITHATTR/COMPLETE
5	catentryId	String	"catentry_id": "3074457345623346260"	Catentry Id	SUMMARY/WITHATTR/COMPLETE
6	mfPartnumber	String	"mfPartnumber":" TPD2E001DRSR"	Manufacturer partnumber	SUMMARY/WITHATTR/COMPLETE
7	supplierPartNumbe r	String	"supplierPartNumber": "NLVSX4373MUTAG",	Supplier partnumber	SUMMARY/WITHATTR/COMPLETE
8	erpPartNumber	String	" erpPartNumber ": "NLVSX4373MUTAG",	Avnet Partnumber	SUMMARY/WITHATTR/COMPLETE
9	partNumber	String	"partNumber": "G BNS 847063"	Part number	SUMMARY/WITHATTR/COMPLETE
10	manufacturerNam e	String	"manufacturerName": "ON Semiconductor",		SUMMARY/WITHATTR/COMPLETE
11	mfCode	String	"mfCode": "ONS",	Manufacturer code	SUMMARY/WITHATTR/COMPLETE
12	minimumQuantity	String	"minimumQuantity": "3000",		SUMMARY/WITHATTR/COMPLETE
13	multipleQuantity	String	"multipleQuantity": "3000",		SUMMARY/WITHATTR/COMPLETE
14	inStock	String	"inv_strlocqty": "62500.0",	In Stock quantity.	SUMMARY/WITHATTR/COMPLETE
15	factoryStock	String	"factoryStock": "32"	Stock	SUMMARY/WITHATTR/COMPLETE SUMMARY/WITHATTR/COMPLETE
16	factoryLeadTime	String	"factoryLeadTime": "63"	factoryLeadTime in Days	SUMMARY/WITHATTR/COMPLETE
17	pdpUrl	String	"pdpUrl": "https://www.avnet.com/shop/us/products/ murata/dlw43sh510xk2l- 3074457345629893781"	Product URL	SUMMARY/WITHATTR/COMPLETE
18	shortDescription	String	" shortDescription": "Voltage Level Translator 8-Pin UDFN T/R",	Short Description	SUMMARY/WITHATTR/COMPLETE
19	longDescription	String	"longDescription": " Voltage Level Translator 8-Pin UDFN T/R "	Long Description	SUMMARY/WITHATTR/COMPLETE



20	obsoleteFlag	String	"obsoleteFlag": "NO"		SUMMARY/WITHATTR/COMPLETE
21	supplierStockFlag	String	"supplierStockFlag": "NO"		SUMMARY/WITHATTR/COMPLETE
22	allocationFlag	String	"allocationFlag": "N"		SUMMARY/WITHATTR/COMPLETE
23	QuoteFlag	String	"QuoteFlag":"Yes"	Indicates whether the this	SUMMARY/WITHATTR/COMPLETE
				is a quote product or not	
24	customReelFlag	String	"customReelFlag": "N"		SUMMARY/WITHATTR/COMPLETE
25	newProductFlag	String	"newProductFlag": "Yes/No",		SUMMARY/WITHATTR/COMPLETE
26	topSellerFlag	String	"topSellerFlag": "Yes/No"		SUMMARY/WITHATTR/COMPLETE
27	packageTypeCode	String	"packageTypeCode": "BLK"		SUMMARY/WITHATTR/COMPLETE
			"packageTypeCode": "TRY"		
28	packageDescriptio	String			SUMMARY/WITHATTR/COMPLETE
	n				
29	endOfLife	String			SUMMARY/WITHATTR/COMPLETE
30	isSoftwareAndIsDo	String	"isSoftwareAndIsDownloadable": "No"		SUMMARY/WITHATTR/COMPLETE
	wnloadable				
31	parentCatGroupNa	String	"parentCatGroupName": "Bridge Rectifier"	Immidiet parent category	SUMMARY/WITHATTR/COMPLETE
	me			ID from the solr response	
				needs to be retrieved.	
32	dataSheetUrl	String	"dataSheetUrl":		SUMMARY/WITHATTR/COMPLETE
			"https://4donline.ihs.com/images/VipMasterl		
			C/IC/MURE/MURE-S-A0005095663/MURE-S-		
			A0005076208-1.pdf"		
33	thumbnail	String	"thumbnail":	Product thumbnail	SUMMARY/WITHATTR/COMPLETE
			"https://www.avnet.com/opasdata/d120001/		
			derivates/4/072/220/726/PF-151558907-40-		
			Image_thumb.jpg"		
34	eccn	String	"ECCN":" EAR99"		SUMMARY/WITHATTR/COMPLETE
35	htsn	String	"SCHEDULE B":" 85411090009.1"		SUMMARY/WITHATTR/COMPLETE
36	scheduleBCode	String	"HTSN":" 85411090009.1"		SUMMARY/WITHATTR/COMPLETE
37	unspscCode	String	"UNSPSC":" 32111500"		SUMMARY/WITHATTR/COMPLETE
38	unspscVersionCod	String	"UNSPSCVERSION":" V15.1101"		SUMMARY/WITHATTR/COMPLETE
	e				
39	rohsComplianceCo	String	'Yes', 'No', 'Exempt'		SUMMARY/WITHATTR/COMPLETE
10	de		II II III III III III III III III III	D (11.1 1	
40	currency	String	"currency": "USD",	Default is based on	SUMMARY/WITHATTR/COMPLETE
				region.	
				EMA – USD	



				EMEA – EUR ASIA – USD This will be same as the currency passed in request. If request parameter is empty, then store default currency will be considered for	
				guest/web users and profile currency will be	
				considered for core user.	
41	price	String ,Integ er	<pre>{ "EntitledPrice":[{ "UnitPrice":[</pre>		SUMMARY/WITHATTR/COMPLETE



			"uom":"C62" }, "priceInRange":{ "value":0.29982, "currency":"USD" } }, }	
42	formattedPrice	String ,Integ er	"tierObject":[{ "tier":0, "price":0.328, "formattedPrice":"0.328" }, { "tier":1, "price":0.306, "formattedPrice":"0.306" }, { "tier":2, "price":0.284, "formattedPrice":"0.284" }, { "tier":-1, "price":"820.00000", "formattedPrice":"820.00" }	SUMMARY/WITHATTR/COMPLETE
43	technicalAttributes	String , Integ er	"technicalAttributes": [{ "name": "Mounting", "value": "Surface Mount" }, {	WITHATTR/COMPLETE



			"name": "Pin Count", "value": "8" }]		
44	attachment	String	attachments":[{"accessLevel":"None","usage" :"Part Image", "attachmentAssetPath":" https://www.avnet.com/opasdata/d120001/ derivates/2/072/220/726/PF-151558907-40- Image_web.jpg"}]	All the assets associated with the product	COMPLETE
45	customerPartNum ber	String	customerPartNumber": ["LOG2612"]	Customer part numbers associated with the catentry against the account	SUMMARY/WITHATTR/COMPLETE
46	designWinFlag	String	"designWinFlag": "No"		SUMMARY/WITHATTR/COMPLETE
47	tariffEligibleFlag	String	"tariffEligibleFlag": "No",	Flag for china tariff products	SUMMARY/WITHATTR/COMPLETE
48	loggedPriceInv	String	"loggedPriceInv":"Yes"		SUMMARY/WITHATTR/COMPLETE
49	productFeatures	String	"productFeatures":" <ii>Output Voltage Range Adjustable Adjustable Nu20131.2\u00a0V\u00a0to\u00a0\u201337\u00a0V<\/li> Ii>Output Current Capability of 1.5\u00a0A\u00a0Max<\/li> Ii>Input Regulation Typically 0.01% Per Input- Strange Change<\/li> Ii>Output Regulation Typically 0.3%<\/li> Ii>Peak Output Current Constant Over Temperature Strange of Regulator<\/li> Ii>Ripple Rejection Typically 77 dB<\/li> Ii>Direct Replacement for Industry-Standard LM237 Str> Add Massey Standard LM237 Str> Add Massey Standard LM237 Str> Add Massey Standard LM237 Str> Add Massey Standard LM237 Standard LM337 Str> Add Massey Standard LM237 Standard LM337 Str> Add Massey Standard LM237 Standard LM337 Standard LM</br></br></br></ii>	Product features list	SUMMARY/WITHATTR/COMPLETE
50	priceInvHide	String	"priceInvHide":"N"		SUMMARY/WITHATTR/COMPLETE
51	tariffFeelList	String	"tariffFeeList":"List 1"	Tariff information related list	SUMMARY/WITHATTR/COMPLETE
52	dropship	String	"dropShip":"No"		SUMMARY/WITHATTR/COMPLETE



53	mdmMaterialNum	String	"mdmMaterialNumber":"732352"		SUMMARY/WITHATTR/COMPLETE
	ber				
54	countryOfOrigin	String	"countryOfOrigin":"UNKNOWN"	Country where the	SUMMARY/WITHATTR/COMPLETE
				product originates	
55	pfFlag	String	"pfFlag" :"Yes"		SUMMARY/WITHATTR/COMPLETE
			"pfFlag" : "No"		

3.5. Status Codes and Messages

Status Code	Status Message
200	The requested completed successfully.
204	No results found
210	Unsupported currency code
400	Bad request. Mandatory parameter <paramname> missing or incorrect value provided</paramname>
400	Bad request. Mandatory parameter <paramname> missing</paramname>
400	Bad request. Incorrect value provided for <paramname></paramname>
400	Bad request. SearchTerm exceeds number of parts allowed
500	Internal server error. Additional details will be contained on the server logs.



3.6. Sample Request and Response

1. Environment: TEST

Search Type	Request	Response
CATENTRYID	https://apigw.avnet.com/external/getDEXFetchProductsDemo?STORE_ID=715839035&searchTerm=3074457345625633131&searchType=CATENTRYID&infoLevel=COMPLETE	Sample Response-UAT2-CA1
CATENTRYID (Multiple)	https://apigw.avnet.com/external/getDEXFetchProductsDemo?STORE_ID=715839035&searchTerm=3074457345626574374 3074457345624833116&searchType=CATENTRYID&infoLevel=COMPLETE	Sample Response-UAT2-CA1
MFPARTNUMBER	https://apigw.avnet.com/external/getDEXFetchProductsDemo?STORE_ID=715839035&searchTerm=MC9S08AC60CFUER&searchType=MFPARTNUMBER&infoLevel=COMPLETE	Sample Response-UAT2-MFI
MFPARTNUMBER (Multiple)	https://apigw.avnet.com/external/getDEXFetchProductsDemo?STORE_ID=715839035&searchTerm=B@54S-7-F MC9S08AC60CFUER&searchType=MFPARTNUMBER&infoLevel=COMPLETE	Sample Response-UAT2-MFI
SUPPLIERPARTNU MBER	https://apigw.avnet.com/external/getDEXFetchProductsDemo?STORE_ID=715839035&searchTerm=MC9S08AC60CFUER&searchType=SUPPLIERPARTNUMBER&infoLevel=COMPLETE	Sample Response-UAT2-SUF
ERPPARTNUMBER	https://apigw.avnet.com/external/getDEXFetchProductsDemo?STORE_ID=715839035&searchTerm=000000000006074587&searchType=ERPPARTNUMBER&infoLevel=COMPLETE	Sample Response-UAT2-ERP
KEYWORD	https://apigw.avnet.com/external/getDEXFetchProductsDemo?STORE_ID=715839035&searchTerm=MCU 8-bit S08&searchType=KEYWORD&infoLevel=COMPLETE	Sample Response-UAT2-KEY



2. Environment: PROD

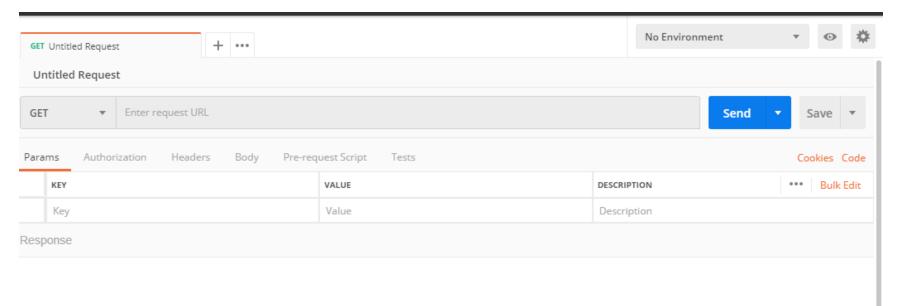
Search Type	Request	Response
CATENTRYID	https://apigw.avnet.com/external/getDEXFetchProducts?STORE_ID=715839035&searchTerm=30 74457345626574374&searchType=CATENTRYID&infoLevel=COMPLETE	ProdResponse_CAT ENTRYID.txt
CATENTRYID (Multiple)	https://apigw.avnet.com/external/getDEXFetchProducts?STORE_ID=715839035&searchTerm=30 74457345626574374 3074457345624833116&searchType=CATENTRYID&infoLevel=COMPLETE	ProdResponse_CAT ENTRYID_MULTIPLE.t
MFPARTNUMBER	https://apigw.avnet.com/external/getDEXFetchProducts?STORE_ID=715839035&searchTerm=MC 9S08AC60CFUER&searchType=MFPARTNUMBER&infoLevel=COMPLETE	ProdResponse_MFP ART.txt
MFPARTNUMBER (Multiple)	https://apigw.avnet.com/external/getDEXFetchProducts?STORE_ID=715839035&searchTerm=B @54S-7-F MC9S08AC60CFUER&searchType=MFPARTNUMBER&infoLevel=COMPLETE	ProdResponse_MFP ART_MULTIPLE.txt
SUPPLIERPARTNU MBER	https://apigw.avnet.com/external/getDEXFetchProducts?STORE_ID=715839035&searchTerm=MC 9S08AC60CFUER&searchType=SUPPLIERPARTNUMBER&infoLevel=COMPLETE	ProdResponse_SUP PART.txt
ERPPARTNUMBER	https://apigw.avnet.com/external/getDEXFetchProducts?STORE_ID=715839035&searchTerm=00 0000000006074587&searchType=ERPPARTNUMBER&infoLevel=COMPLETE	ProdResponse_ERP PART.txt
KEYWORD	https://apigw.avnet.com/external/getDEXFetchProducts?STORE_ID=715839035&searchTerm=MC U 8-bit S08&searchType=KEYWORD&infoLevel=COMPLETE	ProdResponse_KEY WORD.txt



4. Accessing Avnet API with Postman

This section provides information on how to access the Avnet product API with postman, an API testing tool. Postman can be downloaded from https://www.getpostman.com or it can be added as a chrome browser extension. Please find an illustration on how to access the Avnet Product API using postman tool.

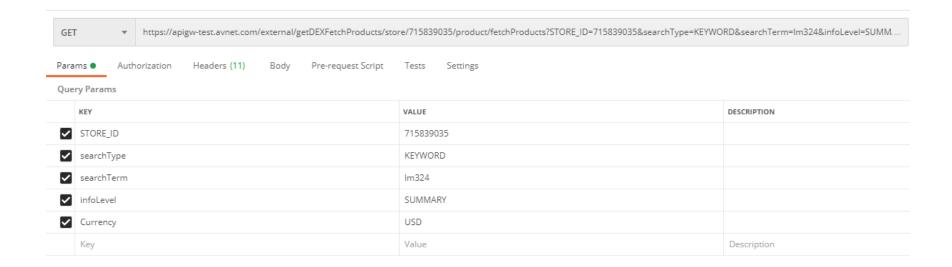
1. Access the Postman tool.





2. Enter the Avnet API URL in the request URL section of the Postman tool. Please find below the sample API request with all the mandatory API parameters

https://apigw.avnet.com/external/getDEXFetchProducts?STORE_ID=715839035&searchTerm=MC9S08AC60CFUER&searchType=SUPPLIERPART NUMBER&infoLevel=COMPLETE

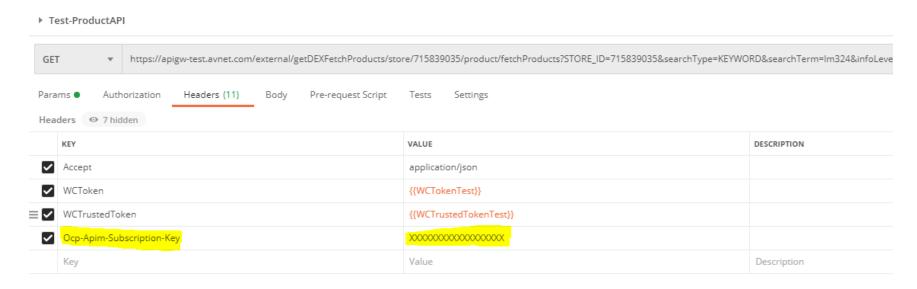


Postman tool will identify the request in that and will display the details accordingly.



3. Supplying Avnet API subscription Id provided during the onboarding process

This is added as a header parameter as shown in the below screenshot. The key is to be substituted from section #2 of the document.



4. Supplying the Avnet API "Never Expire Tokens"
Please click on the "Header" tab next to Authentication. Please enter WCTOKEN and WCTrustedToken mentioned in Section #2 of the document as shown below. Then click on the "Send" button. The Avnet API response will be displayed in the response section.



GET	T ▼ https://apigw-test.avnet.com/external/getDEXFetchProducts/sto	ore/715839035/product/fetchProducts?STORE_ID=715839035&searchType=KEYWO	RD&searchTerm=Im324&infoLevel=SUMM	Send					
Para	ms • Authorization Headers (11) Body Pre-request Script	Tests Settings							
Headers • 7 hidden									
	KEY	VALUE	DESCRIPTION	••• [
~	Accept	application/json							
~	WCToken	{{WCToken}}							
✓	WCTrustedToken								
~	Ocp-Apim-Subscription-Key	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX							
	Key	Value	Description						

3000000



5. Sample code/examples to access Avnet API.

Please find some examples to access Avnet API through CURL, C# .net, Python 2.7, Python 3 and Java

CURL.

```
You must pass the username/ password mentioned in section #2 . Also, you must pass the tokens mentioned in #2 as headers.

curl

-H "Accept: application/json"

-H "WCToken: "xxxxxxx"

-H "WCTrustedToken: xxxxxxxxxxx"

-H "Ocp-Apim-Subscription-Key:xxxxxxxxxxxxx"

-X GET

"https://apigw.avnet.com/external/getDEXFetchProducts/store/715839035/product/fetchProducts?STORE_ID=715839035&search

Type=MFPARTNUMBER&infoLevel=COMPLETE&searchTerm=CSTCR6M00G53-R0"
```

Python 2.7

```
import requests,urllib2, base64
# Avnet API request URL creation
request =
urllib2.Request("https://apigw.avnet.com/external/getDEXFetchProducts/store/715839035/product/fetchProducts?STORE_ID=7158390
35&searchType=MFPARTNUMBER&infoLevel=COMPLETE&searchTerm=CSTCR6M00G53-R0")
# Avnet API tokens given in Section #2
request.add_header("WCTOKEN", "xxxxxxx")
request.add_header("WCTrustedToken", "xxxxxx")
request.add_header("Ocp-Apim-Subscription-Key", "xxxxxx")
result = urllib2.urlopen(request)
print result.read()
```



Python 3

```
import urllib.request
import json
import base64
from bs4 import BeautifulSoup

url = '
https://apigw.avnet.com/external/getDEXFetchProducts/store/715839035/product/fetchProducts?STORE_ID=715839035&searchType=MFPA
RTNUMBER&infoLevel=COMPLETE&searchTerm=CSTCR6M00G53-R0'
request = urllib.request.Request(url)

request.add_header("Authorization", "Basic %s" % base64string.decode('utf-8'))
# Avnet API authentication with username/password given in Section #2

request.add_header("WCToken", "xxxxx")
request.add_header("WCTrustedToken", "xxxxx")
request.add_header("Ocp-Apim-Subscription-Key", "xxxxx")
```

C# .net

Please supply the Avnet API url in the "serviceUrl" parameter mentioned below



```
client.Encoding = Encoding.UTF8;
   client.Headers.Add(HttpRequestHeader.Accept, "application/json");
   client.Headers.Add(HttpRequestHeader.Allow, "GET");
   client. Headers. Add(HttpRequestHeader. UserAgent, "Mozilla/5.0 (Windows; U; MSIE 10.0; Windows NT 9.0; en-US");
   //code for passing WCTOKEN and WCTrustedToken mentioned in section #2
   client.Headers.Add("WCToken", "xxxx");
   client.Headers.Add("WCTrustedtoken", "xxxxx");
   client.Headers.Add("Ocp-Apim-Subscription-Key", "xxxxx");
   client.UseDefaultCredentials = true;
   try
     jsonString = client.DownloadString(serviceUrl); // Please supply Avnet product URL here
    catch (Exception e)
      Trace.TraceInformation("Exception while calling Avent API without cookie.....");
      Trace.TraceError(e.Message + e.StackTrace);
      throw;
catch (Exception e)
 Trace.TraceError(e.Message + e.StackTrace);
 throw;
return jsonString;
```

Java



Please supply the Avnet API url in the " $\texttt{GET_URL}$ " parameter mentioned below

```
String GET_URL = "API URL";
    URL API_URL = new URL(GET_URL);
    HttpsURLConnection API = (HttpsURLConnection) API_URL.openConnection();
    API.setDoInput(true);
    API.setRequestMethod("GET");
    API.setRequestProperty("Accept", "application/json");
    API.setRequestProperty("Ocp-Apim-Subscription-Key","XXXXXXXXXX");
    API.setRequestProperty("WCToken","<WCToken>");
    API.setRequestProperty("WCTrustedToken","<WCTrustedToken>");
    BufferedReader response = new BufferedReader(new InputStreamReader(API.getInputStream()));
    String inputLine;
    while ((inputLine = response.readLine()) != null)
        System.out.println(inputLine);
    response.close();
}
```