

Fomalhaut Start Kit

Version 4

DB Register

1. DB manager (db_manager@fomalhaut.co.jp) will send you an invitation e-mail. If you did not receive invitation, please check junk box first then contact emily_konishi@fomalhaut.co.jp for further assistance.
2. By clicking the link on invitation e-mail, internet browser launches and prompts you to registration screen. Enter your registered e-mail address and create your own password as well as filling other boxes. Click “Register” to complete registration.
3. After second login, access <http://database.fomalhaut.co.jp> and enter your email and password.

Fomalhaut Techno Solutions
Database

Registration Screen

Name

Email

Company

Password

*You have to enter at least 8 characters and maximum 30 characters.

Password confirmation

Register

Login
Screen

<http://database.fomalhaut.co.jp>

Fomalhaut Techno Solutions Database

Remember Me

Login

[Forget Your Password](#)

DB: Search by keyword

1. After login, on the DB portal, enter keyword. User comma (,) for multiple words.
2. Click “Search.” Results appears in lower half of the screen.
3. “Clear” button removes all words you entered.
4. Choose one item and click for details. Window jumps to detailed page.
5. If search result did not meet your requirement, try omitting space before numerical letter so it appears like “iPhone12” instead of “iPhone 12.”



Filter

Free Word Search

Category

Product Type

Manufacturer

Model

Carrier

Product Release From

*Year is mandatory to search by release

Product Release To

*Year is mandatory to search by release

ID	Report Name	Category
2227	Featured_GalaxyS21	Teardown
2210	2210-BOM-Samsung_Galaxy S21 Ultra 5G mmW_SM-G998UI	BOM
2209	2209-TD-Samsung_Galaxy S21 Ultra 5G mmW_SM-G998UI	Teardown
2196	2196-BOM-Samsung_GalaxyS21Ultra5G_SM-G998N	BOM
2195	2195-TD-Samsung_GalaxyS21Ultra5G_SM-G998N	Teardown
2194	2194-BOM-Samsung_Galaxy S21Plus_SM-G996N	BOM
2193	2193-TD-Samsung_Galaxy S21Plus_SM-G996N	Teardown
2192	2192-BOM-Samsung_Galaxy S21_SM-G991N	BOM

DB: Detailed page description

- Available contents appear with hypertext.

Product manual when available



Manual

Document 1

[5048188.pdf](#)

All photos taken



Photo

[Microscope](#)
[Original](#)
[Other](#)
[Processed](#)

Reports in Powerpoint and PDF



Report

Document 1

[2209-TD-Samsung_Galaxy S21 Ultra 5G mmW_SM-G998U1.pdf](#)

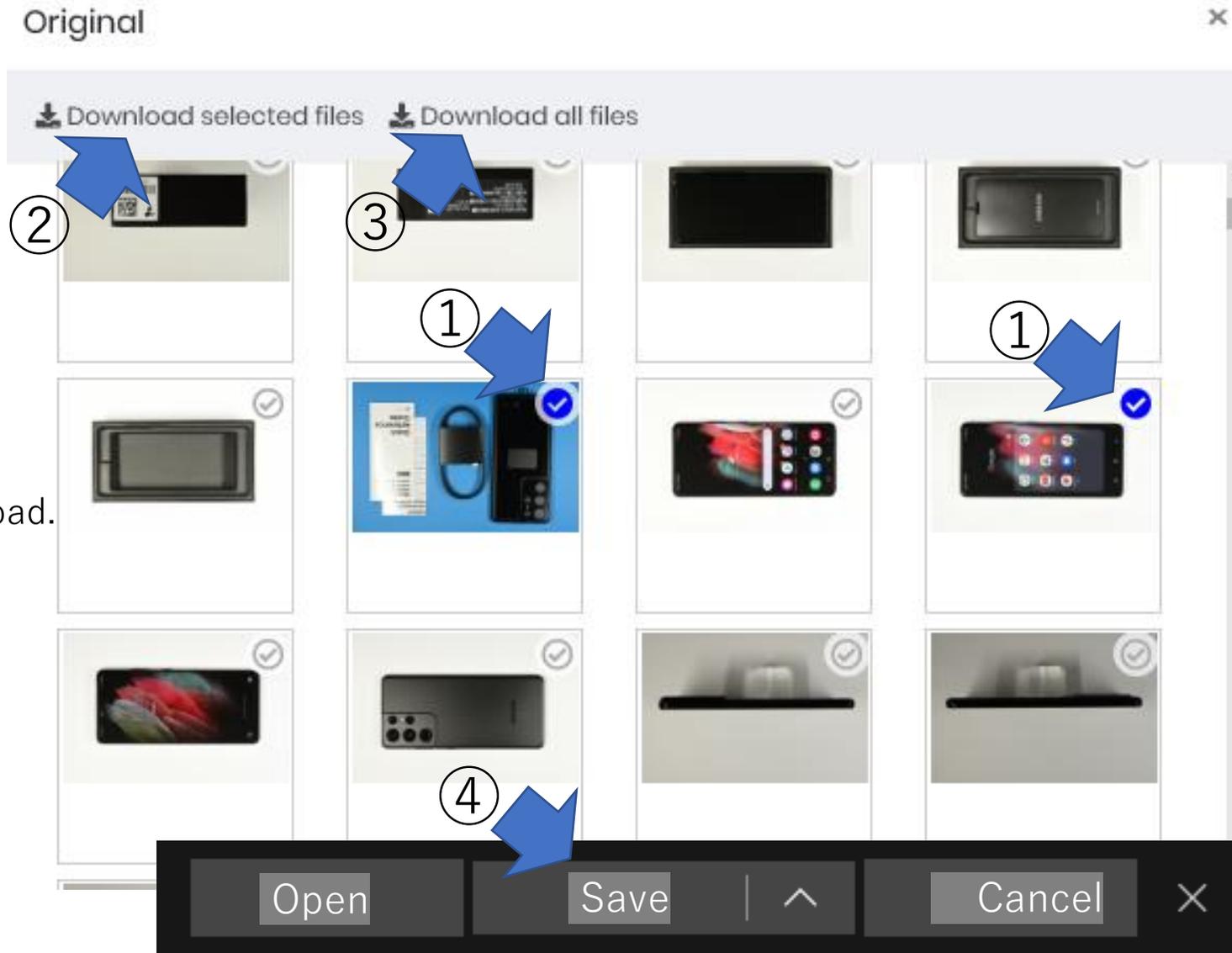
Document 2

[2209-TD-Samsung_Galaxy S21 Ultra 5G mmW_SM-G998U1.pptx](#)

[Back to list](#)

DB: Picking photo

1. Select photos to download. Check mark appears on selected photos.
2. Click ② for selected photo download. Multiple photos are downloaded in ZIP file.
3. Click ③ to download all photos.
4. Browser's saving option pops up. Click ④ "Save".
5. Explorer (or equivalent program) launches. Specify location and file name to start download.

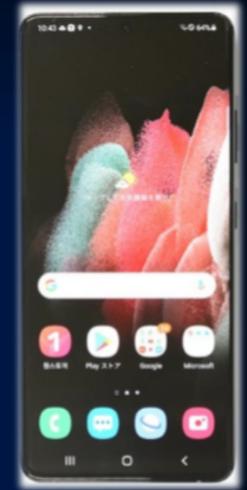


DB: Viewing report

- Select document type to open.
- PDF view opens on new tab on your internet browser.
- Powerpoint click will prompt you to open or save file.

Samsung Galaxy S21 Ultra 5G Teardown

Dimension	75.6 x 165.1 x 8.9mm, 227g
Display	6.8", 1440 x 3200 dot, QHD+, Flexible AMOLED
OS	Android 11
CPU	Samsung Exynos 2100, 8-core, 2.8GHz (assumption)
Memory	12GByte DRAM, 256GByte Flash Memory
Camera	Front 40MP Rear 12MP Ultra-wide + 108MP Wide + 10MP Telephoto + 10MP Telephoto
Battery	3.88V, 5000mAh, Li-Ion Polymer
Running Time	3G unknown, 4G unknown, 5G unknown, WiFi unknown
Motion Sensor	Accelerometer, Gyroscope, Compass, Barometer
Ambient Sensor	Proximity, Light, Laser
Biometric Sensor	-
Security Sensor	Fingerprint
Cellular	2G, 3G, 4G, 5G
Connectivity	Wi-Fi (802.11a/b/g/n/ac/ax), Bluetooth 5.2, NFC, Qi
Location	GPS, GLONASS, BDS, Galileo
External Connection	USB Type-C
External Memory	-
Water/Dust Repellent	IP68



Manufacturer	Samsung
Model Name	Galaxy S21 Ultra 5G
Model Number	SM-G998N
Authentication	R-C-SEC-SMG998
Carrier	KT
Product Release	2021.01.29
Assembled in	unknown
Retail Price	USD1,200.00
Document ID	2195

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Report

Document 1

PDF



[2195-TD-Samsung_GalaxyS21Ultra5G_SM-G998N.pdf](#)

Document 2

Powerpoint



[2195-TD-Samsung_GalaxyS21Ultra5G_SM-G998N.pptx](#)

DB: 3 report types

- From “Category” window, pick one of the following three report types:
 1. Teardown (picture-based disassembling information)
 2. BOM (bill of material / cost information)
 3. Trend Report (subject-specific comparison report, etc.).
- You still need to fill out other windows to narrow down search target.

The screenshot shows a 'Filter' section with several input fields and a dropdown menu. A blue arrow points to the 'Category' field, and another blue arrow points to the 'BOM' option in the dropdown menu. The dropdown menu is open, showing 'Nothing selected' at the top, followed by a search bar, and then three options: 'BOM', 'Teardown', and 'Trend Report'. Below the dropdown are two sets of three dropdown menus, each with a red asterisk and the text '*Year is mandatory to search by release'. At the bottom is a yellow 'Clear' button.

Filter

Free Word Search

Category

Product Type

Manufacturer

Model

Carrier

Product Release From

Product Release To

Nothing selected

BOM

Teardown

Trend Report

*Year is mandatory to search by release

*Year is mandatory to search by release

✕ Clear

DB: Product Type parameter

- Single selection is available at this point of time.

The image shows a user interface for filtering products. At the top, there is a grey bar with a blue 'Filter' icon and the word 'Filter'. Below this, a list of filter categories is displayed: 'Free Word Search', 'Category', 'Product Type', 'Manufacturer', 'Model', 'Carrier', 'Product Release From', and 'Product Release To'. A blue arrow points from 'Product Type' to a dropdown menu on the right. The dropdown menu is open, showing a list of product types: 'Air Cleaner', 'Air Conditioner', 'Automotive', 'Base Station', 'Camera', 'Cleaner', 'Data Card', 'Digital Camera', 'Digital Photo Frame', 'Display', 'Drone', 'E-Cigarette', 'Feature Phone', 'Game', 'Healthcare', 'Healthcare/Healthcare', 'Home Appliance', 'Industrial', 'IoT', and 'LCD TV'. The 'Base Station' option is highlighted with a blue background. At the bottom of the filter list, there is a yellow button with a black 'X' icon and the text 'Clear'.

DB: Product Release Date parameter

- When you use this option, entering “year” box in “Product Release From” line is mandate.
- Other boxes could be empty.

The screenshot shows a search filter interface with the following elements:

- Filter** (blue header)
- Free Word Search** (text input)
- Category** (dropdown menu showing "Nothing selected")
- Product Type** (dropdown menu showing "Base Station")
- Manufacturer** (text input)
- Model** (text input)
- Carrier** (text input)
- Product Release From** (dropdown menu showing "2000")
- Product Release To** (dropdown menu showing "2000")
- Clear** (yellow button)

Annotations:

- A blue arrow points to the "Product Release From" label.
- A red arrow labeled "mandate" points to the "2000" dropdown value.
- A blue arrow points to the "Product Release To" dropdown menu, which is open and shows a list of years from 2000 to 2005.

Red text annotations:

- *Year is mandatory to search by release
- latory to search by release

BOM: General

- On DB portal, click “Bom Data” on left index.
- Pricing in JPY will be removed shortly.
- Historical price search capability below is under final launch phase as the nearest upgrade.

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News and Events

2021/02/08
NEW REPORTS ON FEBRU...

2021/01/20
NEW REPORTS ON JANUAR...

2020/12/20
NEW REPORTS ON DECEM...

More...

Database

Bom Data



Bom Data

Filter

Free Word Search: Free Text space using AND. "*" using OR.

Bom Category: Choose one or more Bom Categories

Bom Function: Choose one or more Bom Functions

Bom Manufacturer: Choose one or more Bom Manufacturers

Price (USD): Input price from (USD) - Input price to (USD)

Unit Price (USD): Input unit price from (USD) - Input unit price to (USD)

Price (JPY): Input price from (JPY) - Input price to (JPY)

Unit Price (JPY): Input unit price from (JPY) - Input unit price to (JPY)

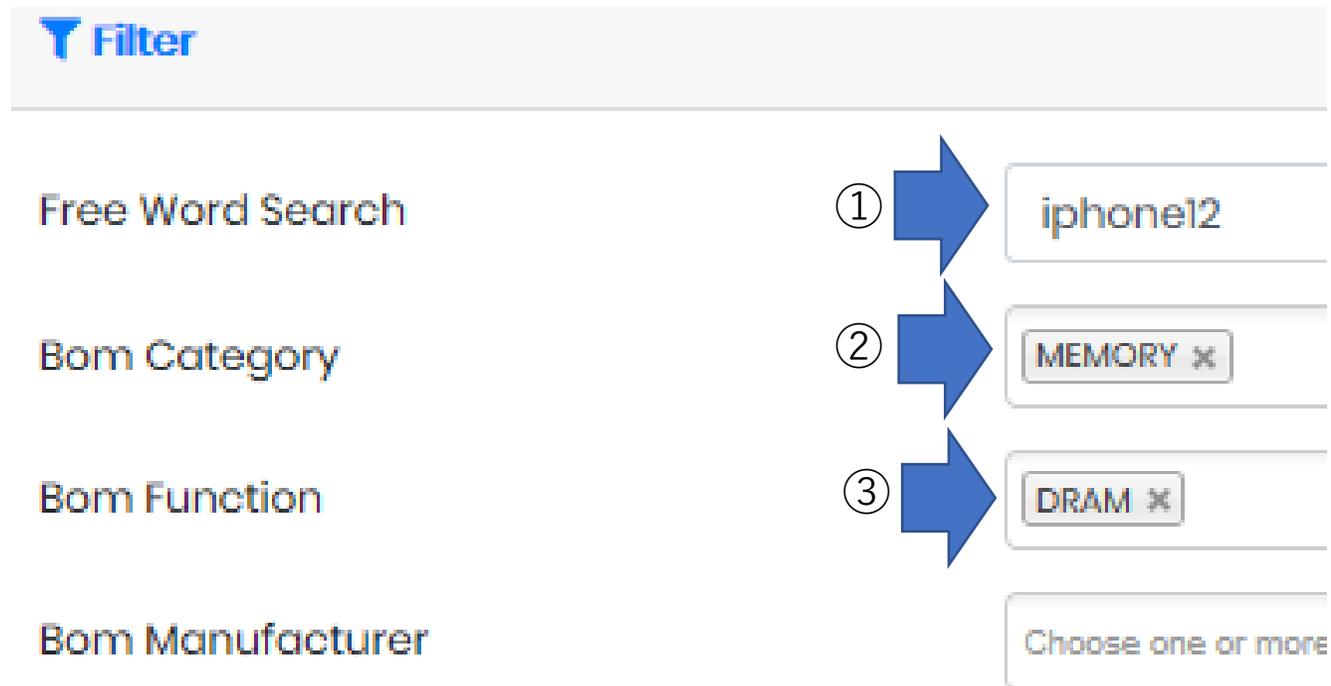
Product Release (from)

CSV download All

Product Type	Manufacturer	Bom Category	Bom Function	Part Number	Location	Unit Price(USD)				
						2016	2017		2019	2020
						iPhone 7	iPhone 8	iPhone X, A1902	iPhone 11 Pro, A2215	iPhone 12 Pro, A2341
Smartphone	Apple	CONTROLLER	APPLICATION PROCESSOR	A10	PCB#1	\$17.50				
Smartphone	Apple	CONTROLLER	APPLICATION PROCESSOR	A11 APL1W72	PCB#1		\$25.00	\$25.00		
Smartphone	Apple	CONTROLLER	APPLICATION PROCESSOR	A13	PCB#2				\$35.00	
Smartphone	Apple	CONTROLLER	APPLICATION PROCESSOR	A14 IPL1W01	PCB#1					\$40.00

BOM: For Precise Search

- To reach desired BOM cost information on specific product, we recommend filling out the following three parameters:
 1. Free Word Search: such as “iPhone12”
 2. BOM Category: such as “Memory” – from preset word selection window
 3. BOM Function: such as “DRAM” – from preset word selection window
- Capable of choosing multiple words out of preset word selection window, such as “DRAM” “Flash Memory.”



The image shows a screenshot of a search filter interface. At the top, there is a grey header bar with a blue downward-pointing triangle icon and the word "Filter" in blue. Below this, there are four search criteria listed on the left, each with a corresponding input field on the right. Three blue arrows with circled numbers (1, 2, and 3) point from the right side of the text to the input fields. The first input field contains "iphone12". The second input field contains "MEMORY" followed by a small grey 'x' icon. The third input field contains "DRAM" followed by a small grey 'x' icon. The fourth input field contains the text "Choose one or more".

Filter Label	Value
Free Word Search	iphone12
Bom Category	MEMORY x
Bom Function	DRAM x
Bom Manufacturer	Choose one or more

BOM: Reminders

- Memory Price per Capacity:
On many products, only one memory chip is used, but capacity is different per product. To reach price per capacity, please divide the value in “Price” window by capacity in “Remark” window on the BOM Data search result page.
- Complex Components:
Camera and display are broken into subsequent element level such as CMOS image sensor, lens, etc. To reach total BOM cost for such complex components, we recommend you doing back to Database program and download target product BOM file and add the BOM cost on Excel spreadsheet as shown below.

CATEGORY	FUNCTION	MANUFACTURER	PART NUMBER	LOCATION	QUANTITY	UNIT PRICE (USD)	PRICE (USD)	REMARK
REAR CAMERA	REAR CAMERA #1 IMAGE SENSOR	UNKNOWN	UNKNOWN	MAIN CAMERA	1	\$8.4000	\$8.4000	16MP CMOS
	MODULE ASSEMBLY	UNKNOWN	UNKNOWN	MAIN CAMERA	1	\$1.0000	\$1.0000	
	LENS	UNKNOWN	UNKNOWN	MAIN CAMERA	1	\$1.1000	\$1.1000	
	VOICE COIL MOTOR	UNKNOWN	UNKNOWN	MAIN CAMERA	1		\$0.5000	
	OIS ACTUATOR	-	-	-	-	-	\$0.0000	
	OIS DRIVER	-	-	-	0	\$0.0000	\$0.0000	
	OTHER	UNKNOWN	UNKNOWN	MAIN CAMERA	1	\$1.0000	\$1.0000	
	LENS ALIGNMENT SENSOR	-	-	-	0	\$0.0000	\$0.0000	
	REAR CAMERA #2 IMAGE SENSOR	UNKNOWN	UNKNOWN	MICRO LENS	1	\$1.5345	\$1.5345	2MP CMOS
	MODULE ASSEMBLY	UNKNOWN	UNKNOWN	MICRO LENS	1	\$1.0000	\$1.0000	
	LENS	UNKNOWN	UNKNOWN	MICRO LENS	1	\$0.8000	\$0.8000	
	VOICE COIL MOTOR	-	-	-	0	\$0.0000	\$0.0000	

Add these numbers



Inventory Login

1. Open to everyone.
2. Click https://web.zaico.co.jp/users/sign_in
3. Use one of following two IDs to log in.

ID#1: inventory@fomalhaut.co.jp
PW#1: fomalhaut

ID#2: invnetory2@fomalhaut.co.jp
PW#2: fomalhaut2



ID#1 or ID#2

PW#1 or PW#2

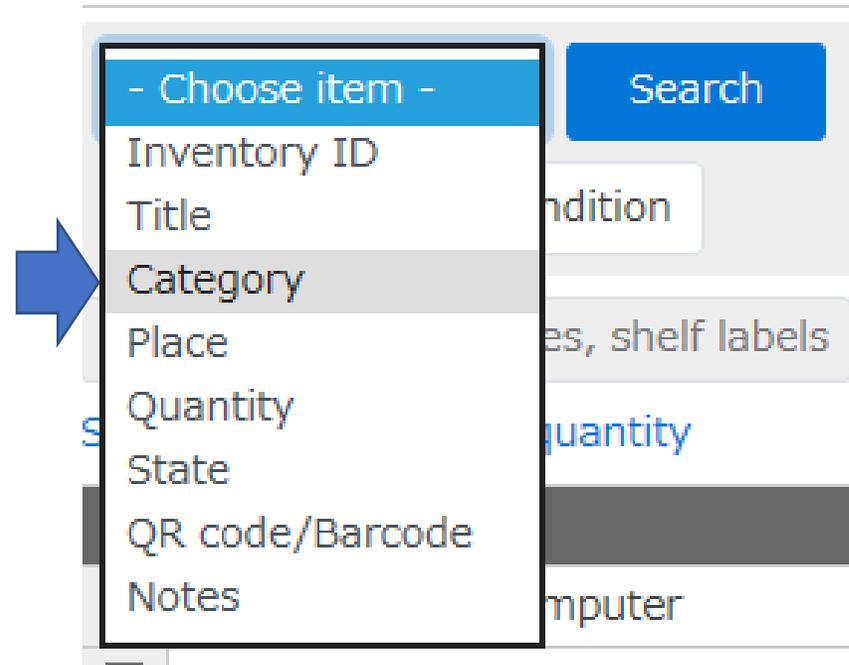
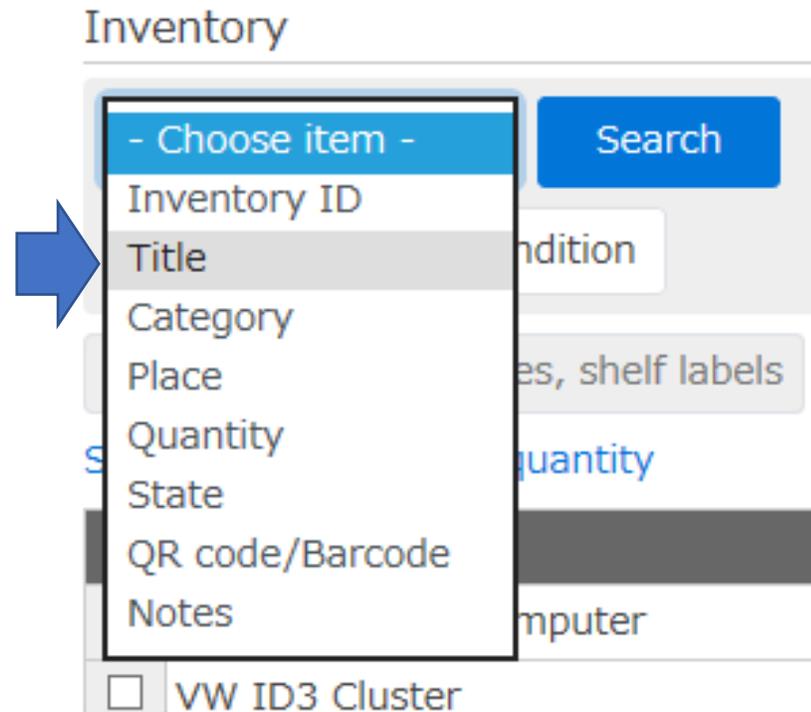
[パスワードを忘れたら](#)

Login

ログインしたままにする

Inventory: 8 parameters to combine

- Title search suits looking up product by name such as Galaxy S20 or by specific model number. If you feel you are not getting desired results, try omitting space between words (such as “GalaxyS20”).
- Category search is helpful when you have specific product application such as automotive.
- Currently 8 parameters are prepared. You can pick and combine these parameters by preference.



Help

- Lost password?
Please try first using recovery tools in each service. If the situation is consistent, please contact DB manager.
- Add new user:
Send DB manager a new user's email. System will send access link and password by return.
- Technical support:
Please email to DB manager emily_konishi@fomalhaut.co.jp for further assistance.
- Inquiry about report contents:
Please contact minatake_kashio@fomalhaut.co.jp for further clarification.

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