



**Eval Kit Manual**

# **AS3722**

## **Standard Board**

**AS3722-CT-00\_EK\_ST AS3728**

## Table of Contents

|       |                                                          |    |
|-------|----------------------------------------------------------|----|
| 1     | Introduction .....                                       | 3  |
| 1.1   | Kit Content .....                                        | 4  |
| 2     | Getting Started .....                                    | 5  |
| 3     | Hardware Description .....                               | 6  |
| 4     | Software Description .....                               | 8  |
| 4.1   | LDO .....                                                | 9  |
| 4.2   | DCDC .....                                               | 10 |
| 4.2.1 | DCDC0, DCDC1, DCDC6 .....                                | 10 |
| 4.2.2 | DCDC2 – DCDC5 .....                                      | 11 |
| 4.2.3 | OC_PG / PWM Settings .....                               | 12 |
| 5     | Schematics, Layers and BOM .....                         | 13 |
| 5.1   | Schematics of AS3722 and AS3728 Evaluation Board .....   | 14 |
| 5.2   | Board Layout of AS3722 and AS3728 Evaluation Board ..... | 18 |
| 5.3   | BOM .....                                                | 21 |
| 6     | Ordering & Contact Information .....                     | 22 |
| 7     | Copyrights & Disclaimer .....                            | 23 |
| 8     | Revision Information .....                               | 24 |

## 1 Introduction

This document describes the AS3722 and AS3728 Evaluation Kit.

The AS3722 is a compact System PMU supporting up to 20 high current rails. It features 4 DCDC buck converters as well as 12 low noise LDOs. The different regulated supply voltages are programmable via the serial control interface. AS3722 further features 3DCDC buck controller which are ideal to support processor currents ranging from 5A up to 32A.

The single supply voltage may vary from 2.5V to 5.5V

The Evaluation Kit has to be externally supplied. The graphical user interface (GUI) runs on PC running Windows 7 and allows the user to control the AS3722. Use the enclosed USB cable to connect the PC with the Evaluation board.

The AS3728 is a companion power stage, intended to be used with AS372x products.

It cannot be used without a DCDC controller. It contains the power FETs for 2 phases and is capable to handle output currents of 4A per phase.

## 1.1 Kit Content

The AS3722 and AS3728 Evaluation Kit include all items listed in Figure 1: Kit Content.

**Figure 1: Kit Content**

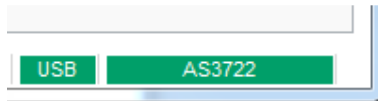
| Item                 | Comment                        |
|----------------------|--------------------------------|
| USB flash drive      | Includes document and software |
| Evaluation board     | AS3722 and AS3728              |
| USB connection cable |                                |

## 2 Getting Started

Drive the AS3722 and AS3728 only with the recommended settings and values as described in the datasheet. Please check [www.ams.com](http://www.ams.com) for the latest version.

For a detailed description of the Kit please read sections 3-5 of this document.

- Install the GUI from the attached USB flash drive
- Establish the connection between PC and Evaluation board via the enclosed USB cable
- Supply AS3722 Evaluation Board with the battery which is included in this kit. Check first if the battery is loaded (~ 3.7 VDC).
- Connect the battery to VBAT and GND. Make sure that all four Jumpers are set between J43 and J44 in order to connect VBAT to VSUP.
- Remain all other Jumpers in the default setting (ex-factory).
- Start the GUI and connect the USB Box to a PC USB Port.
- First of all please **perform a firmware upgrade** on the Evaluation board in order to ensure a proper communication to the GUI! The appropriate firmware file for the Evaluation board comes with the GUI software and can be found in the GUI installation directory (default: C:\Program Files (x86)\ams\AS372x Evaluation Software\firmware). Open “Help” in the top command bar and press “Firmware update” to initiate the procedure. Never disconnect the battery or interrupt the connection to the PC during the update!!!
- If the AS3722 Evaluation Board is supplied and connected properly to the PC and the appropriate firmware file is installed, the field at the right bottom corner of the GUI becomes green

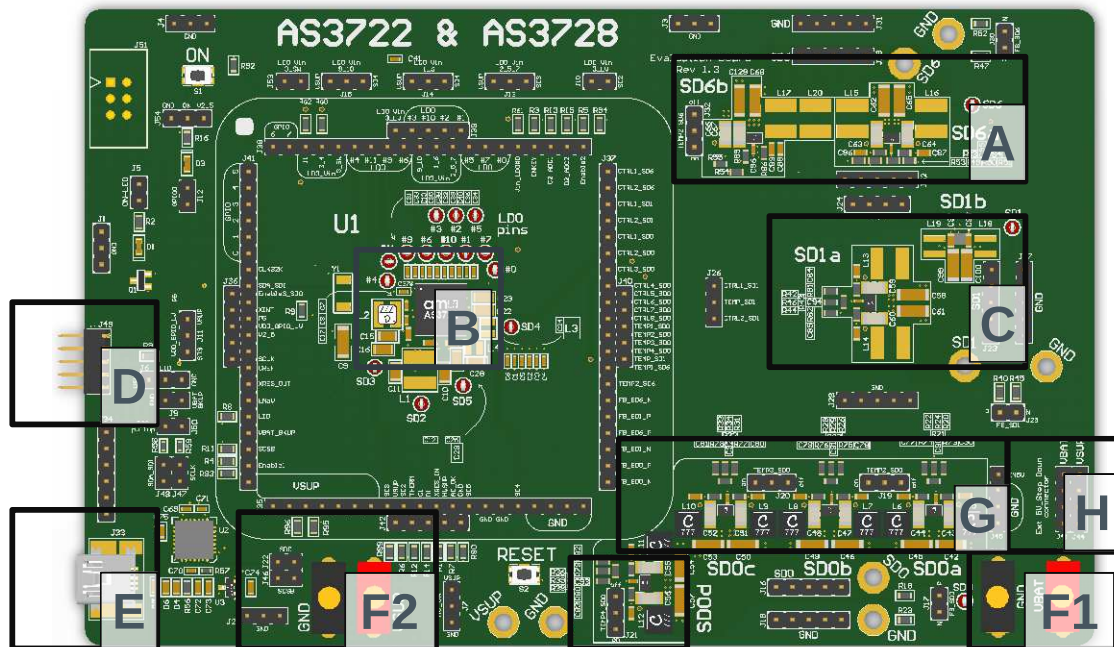


For further information do not hesitate to contact us.

### 3 Hardware Description

The AS3722 and AS3728 Evaluation Board can be powered via an external power supply or via battery (label E). The AS3722 and AS3729 can be controlled with the onboard  $\mu\text{C}$  or any other controller board via 10 pole connector which enables fast code debugging (label D).

Figure 2: Evaluation Board Overview



| Label    | Name                   | Designator             | Description                                            | Info                                                                                                                                                                                                                                          |
|----------|------------------------|------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A        | SD6                    | SD6a, SD6b             | 2 pcs. AS3728 external Power Stages providing max. 12A | Can be used in a special mode using 2 phases with 2 power stages which provides up to 12A. Requires coils capable of supporting 6A each                                                                                                       |
| B        | AS3722                 | U1                     |                                                        | PMU supporting up to 20 high current rails                                                                                                                                                                                                    |
| C        | SD1                    | SD1                    | 1 pc. AS3728 external Power Stage providing max. 6A    | Support for single, dual or combined phase(s) operation, 3A per phase                                                                                                                                                                         |
| D        | Controller interface   | J49                    | Controller interface                                   | Can be connected to an external controller                                                                                                                                                                                                    |
| E        | USB connector          | J33                    | USB Mini B                                             | Interface to the PC                                                                                                                                                                                                                           |
| F1<br>F2 | VBAT, GND<br>VSUP, GND | BU1, BU2<br>BU11, BU12 | VBAT<br>VSUP                                           | Voltage Range: 2.7V to 5.5V. You can use the Battery for VBAT and an ext. Supply for VSUP (default: no jumper on J43, J44) or one ext. Supply on VBAT with jumper on J34, J44).                                                               |
| G        | SD0                    | SD0a, SD0b, SD0c, SD0d | 4 pcs. AS3728 external Power Stages providing max. 24A | The output current is easily scalable by varying the number of phases and power-stages from 3A up to 24A                                                                                                                                      |
| H        | VBAT to VSUP           | J43, J44               | Connect VBAT to VSUP                                   | <p>With this jumper setting the max. permissible voltage supply is 5.5V. Default setting = all 4 Jumpers are set between J43 and J44.</p>  <p>J43 J44</p> |

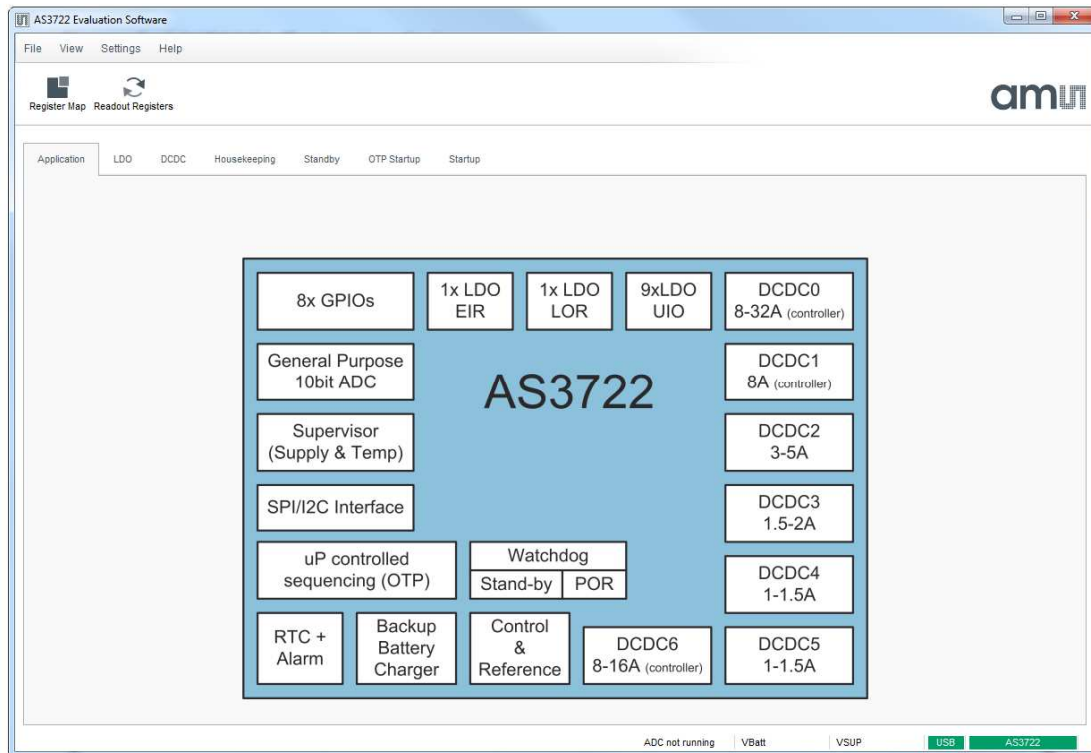
## 4 Software Description

The graphical user interface (GUI) is used to control the AS3722 Evaluation board.

Start the GUI and setup the Hardware according section **Error! Reference source not found.**  
**Error! Reference source not found.**

Make sure hardware is recognized and indicators on the bottom right side of the GUI are green colored.

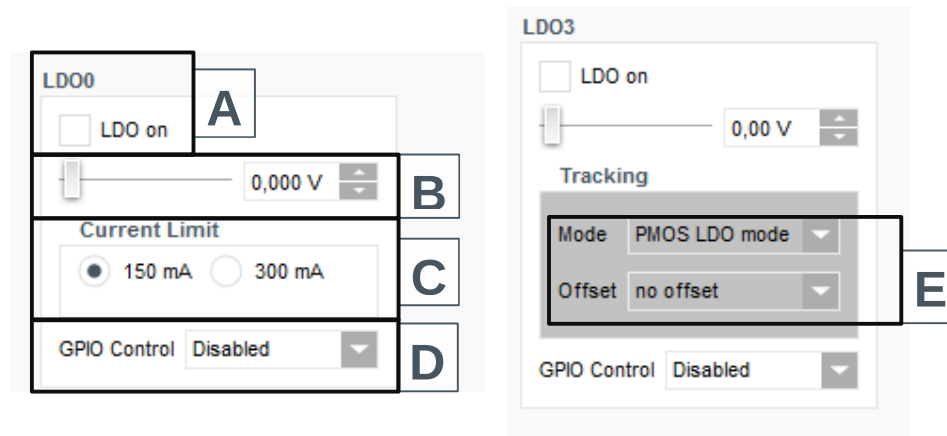
**Figure 3: AS3722 Evaluation Software**



## 4.1 LDO

The AS3722 features 12 low noise LDO's.

**Figure 4: LDO Settings**



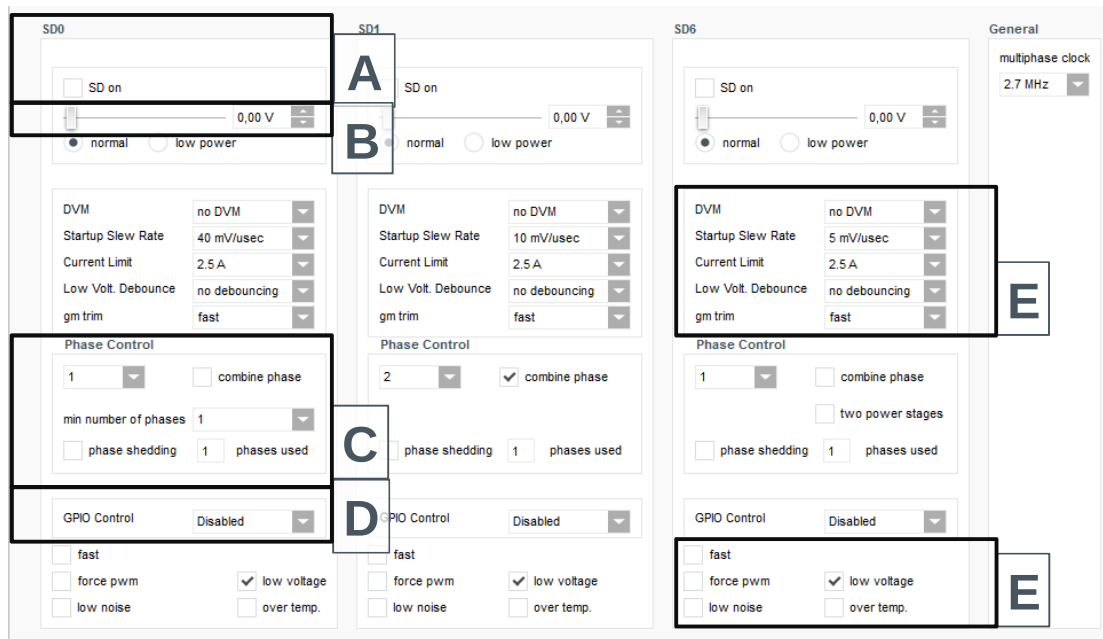
| Label | Name           | Comment                                            |
|-------|----------------|----------------------------------------------------|
| A     | LDO on         | Enabling / Disabling of LDOs                       |
| B     | Vout Regulator | Output voltage                                     |
| C     | Current Limit  | Minimum current Limit setting                      |
| D     | GPIO Control   | GPIO controlling of LDOs                           |
| E     | Tracking       | LDO3 works independent or tracks the Vout of DCDC1 |

## 4.2 DCDC

### 4.2.1 DCDC0, DCDC1, DCDC6

The AS3720 features 3 DCDC step down controller which are generally used in combination with the external Power Stages AS3729.

**Figure 5: Settings for DCDC controllers**

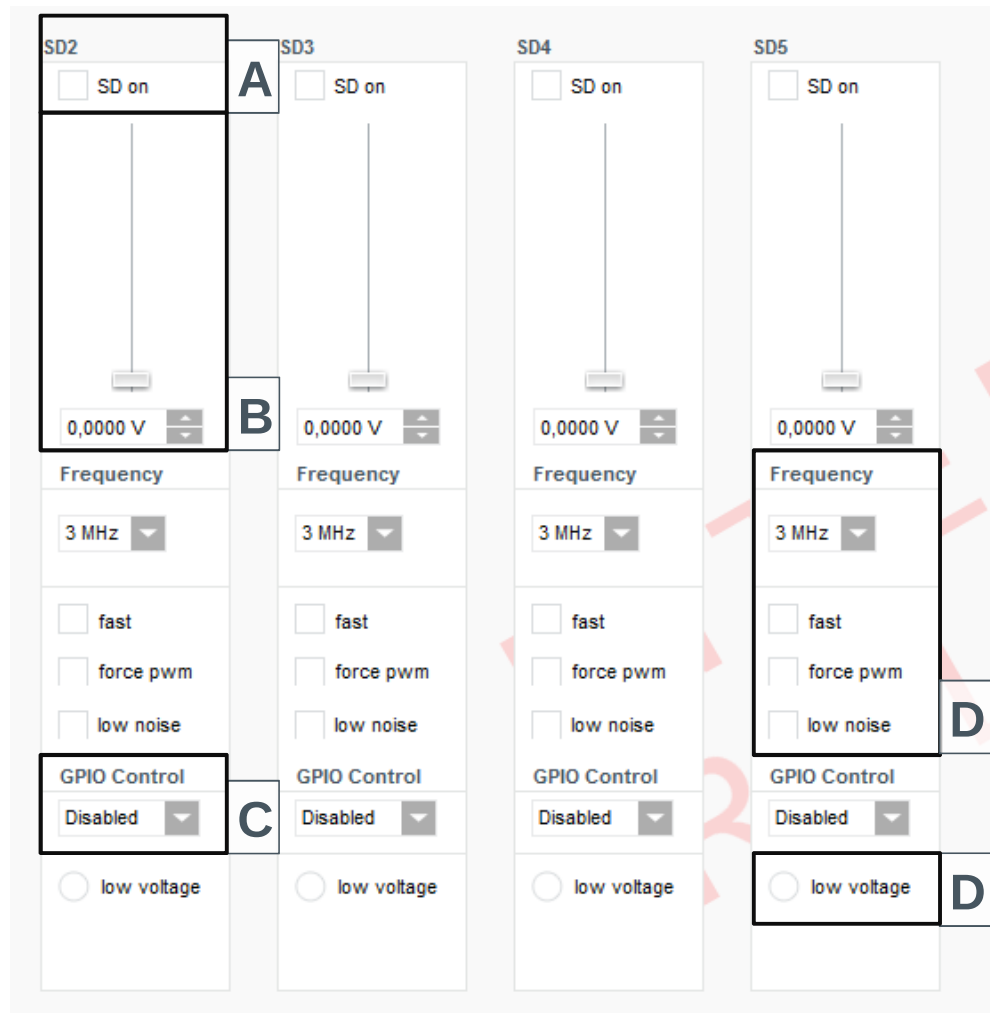


| Label | Name           | Comment                                                                                                                                                                                                          |
|-------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A     | SD on          | Enabling / Disabling of DCDCs                                                                                                                                                                                    |
| B     | Vout Regulator | Output voltage                                                                                                                                                                                                   |
| C     | Phase Control  | SD0: Up to 4 Power Stages and 8 phases can be used. As well as a combined mode of phases 1 and 2, 3 and 4, 5 and 6, 7 and 8 is possible.<br>SD1 and SD6: Support for single, dual or combined phase(s) operation |
| D     | GPIO Control   | GPIO controlling of DCDCs                                                                                                                                                                                        |
| E     | Mode Settings  | For further details please refer to the AS3720/21 datasheet. The latest version of the datasheet can be found on our homepage, <a href="http://www.ams.com">www.ams.com</a>                                      |

### 4.2.2 DCDC2 – DCDC5

The AS3722 features 4 DCDC step down regulators.

Figure 6: Settings for DCDC regulators



| Label | Name           | Comment                                                                                                                                                                     |
|-------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A     | SD on          | Enabling / Disabling of DCDCs                                                                                                                                               |
| B     | Vout Regulator | Output voltage                                                                                                                                                              |
| C     | GPIO Control   | GPIO controlling of DCDCs                                                                                                                                                   |
| D     | Mode Settings  | For further details please refer to the AS3720/21 datasheet. The latest version of the datasheet can be found on our homepage, <a href="http://www.ams.com">www.ams.com</a> |

### 4.2.3 OC\_PG / PWM Settings

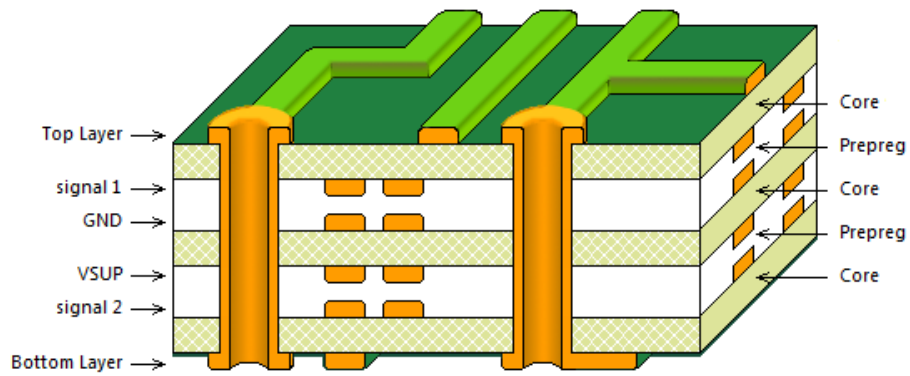
The AS3722 features for SD0 a PWM Control.

| SD0 Over Current / Power Good                                                                                                                                                                                                                                                                                                                                                                                | PWM Control                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| SD0 ovc alarm: <span>disabled</span><br>SD0 ovc alarm debounce: <span>no debouncing</span> <input type="checkbox"/> Over Current                                                                                                                                                                                                                                                                             | <input type="checkbox"/> SD0 PWM Control<br><input checked="" type="radio"/> 10mV steps<br><input type="radio"/> 20mV steps     |
| <input type="checkbox"/> SD0 over current mask<br><input type="checkbox"/> SD0 power good mask: <span>no masking</span><br><input type="checkbox"/> VresFall mask<br><input type="checkbox"/> GPIO5 mask<br><input type="checkbox"/> GPIO4 mask<br><input type="checkbox"/> GPIO3 mask<br><input type="checkbox"/> AC_OK mask <input type="checkbox"/> pg_ac_ok invert <input type="checkbox"/> oc_pg invert | Base: <span>0.6V</span> vpwm1 reset: <span>vpwm1_on &amp; vpwm1_val</span><br>Value: <span>0.60V</span> max: <span>1.28V</span> |
| SD6 overcurrent<br>SD6 oVC alarm: <span>disabled</span><br><input type="checkbox"/> SD6 over current mask<br><input type="checkbox"/> SD6 power good mask<br>SD6 oc-pg mask time: <span>no masking</span>                                                                                                                                                                                                    | <input type="checkbox"/> SD6 PWM Control<br><input checked="" type="radio"/> 10mV steps<br><input type="radio"/> 20mV steps     |
|                                                                                                                                                                                                                                                                                                                                                                                                              | Base: <span>0.6V</span> vpwm2 reset: <span>vpwm2_on &amp; vpwm2_val</span><br>Value: <span>0.60V</span> max: <span>1.28V</span> |

## 5 Schematics, Layers and BOM

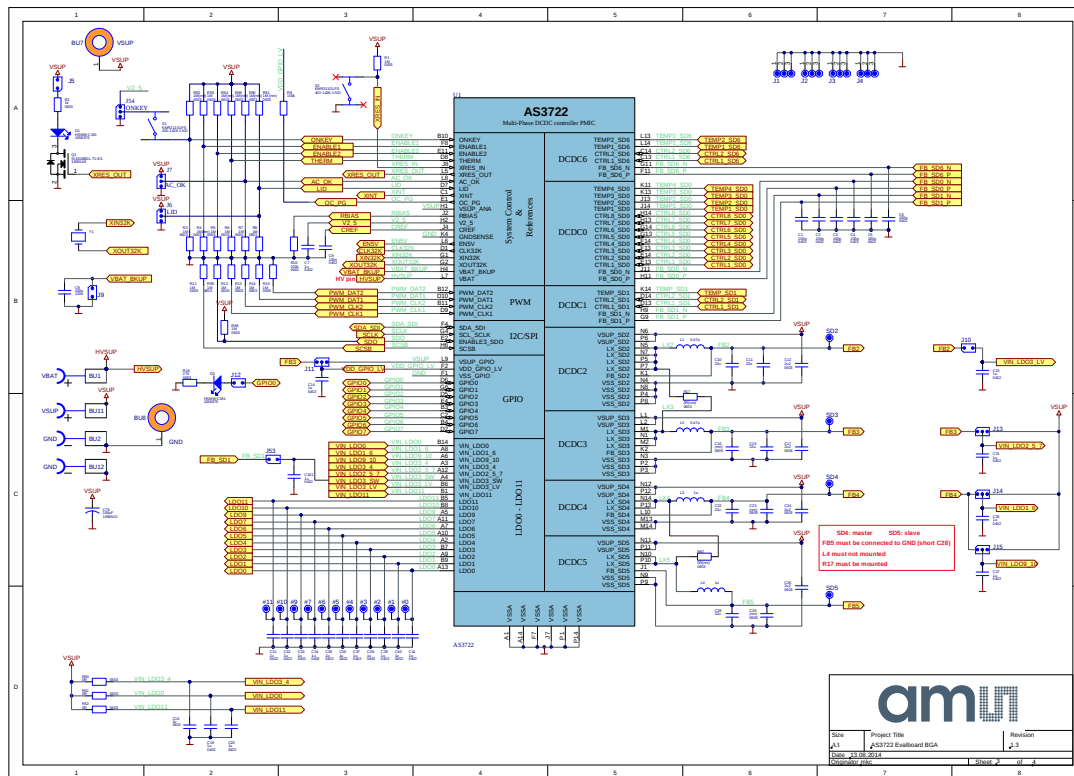
The AS3722 and AS3728 Evaluation Board is a 6-layer FR4 board. The main components are the AS3722 together with the Power Stages AS3728 plus additionally some active components, passive components, several test points and connectors.

Figure 7: AS3722 and AS3728 PCB Layer Stack up



## 5.1 Schematics of AS3722 and AS3728 Evaluation Board

Figure 8: Schematic page 1



**Figure 9: Schematic page 2**

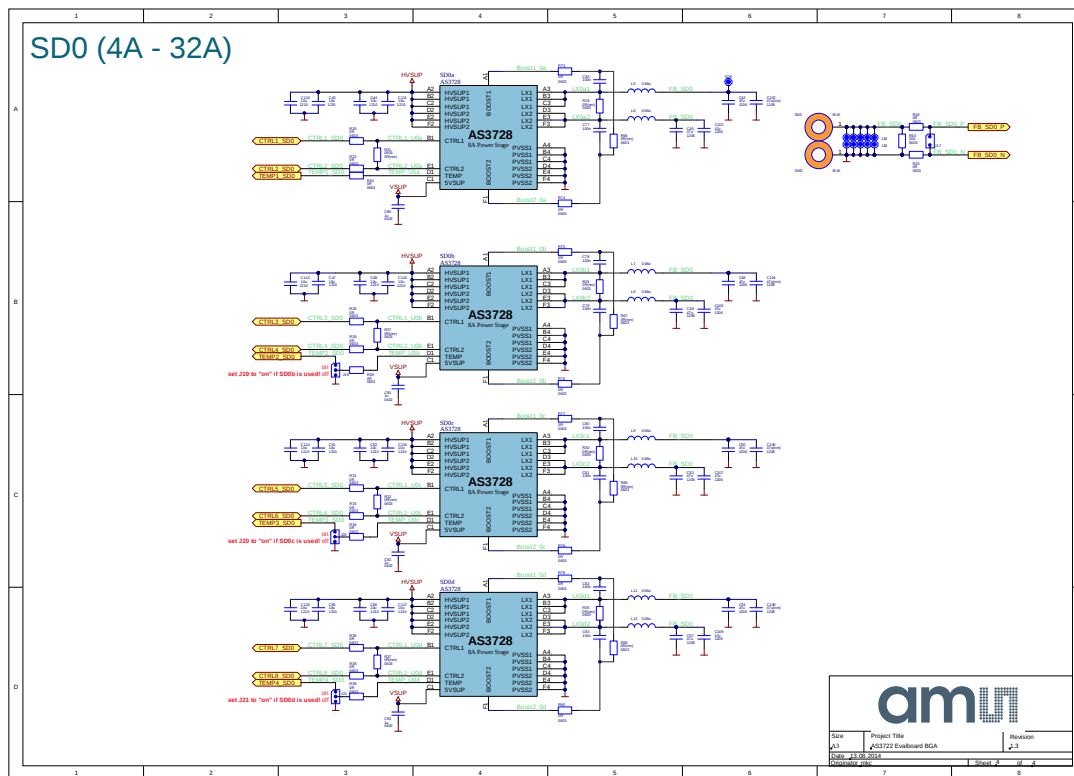


Figure 10: Schematic page 3

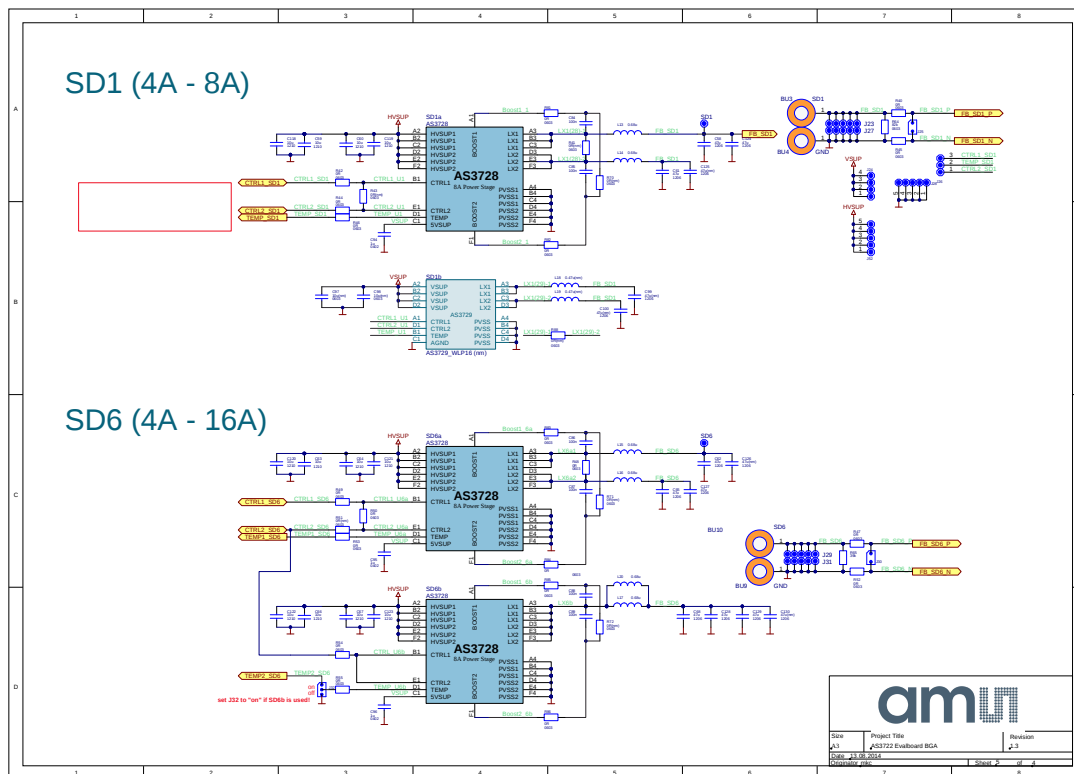
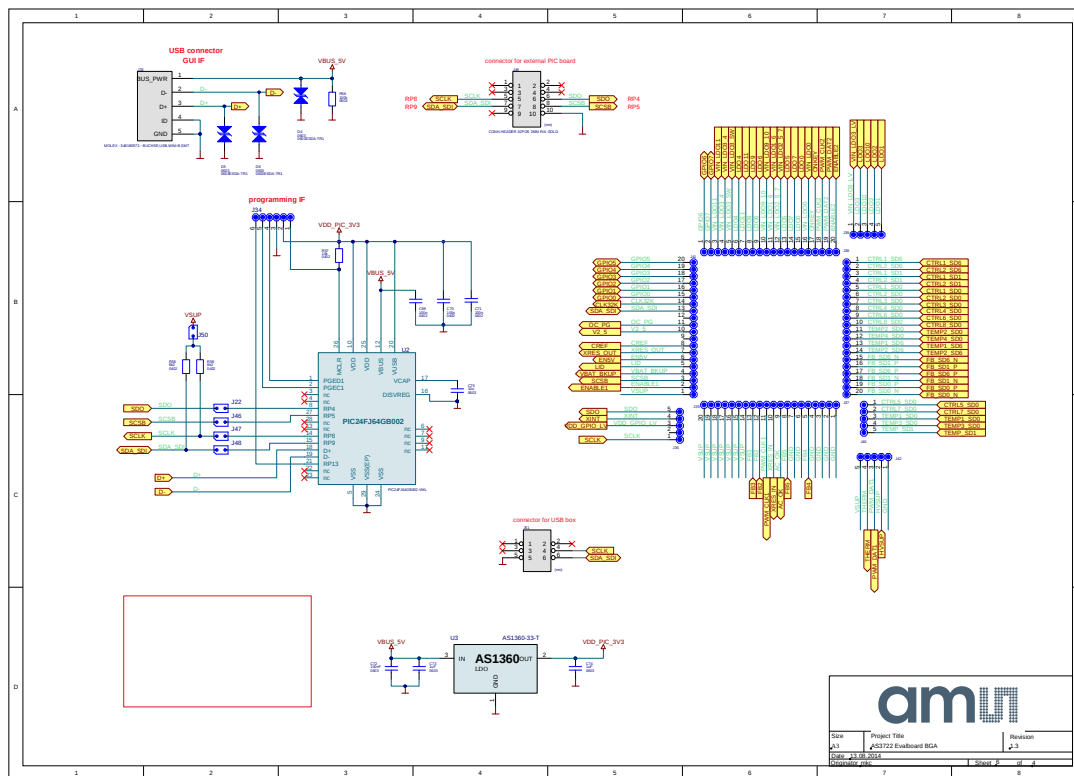


Figure 11: Schematic page 4



## 5.2 Board Layout of AS3722 and AS3728 Evaluation Board

Figure 12: Top Layer & Silk

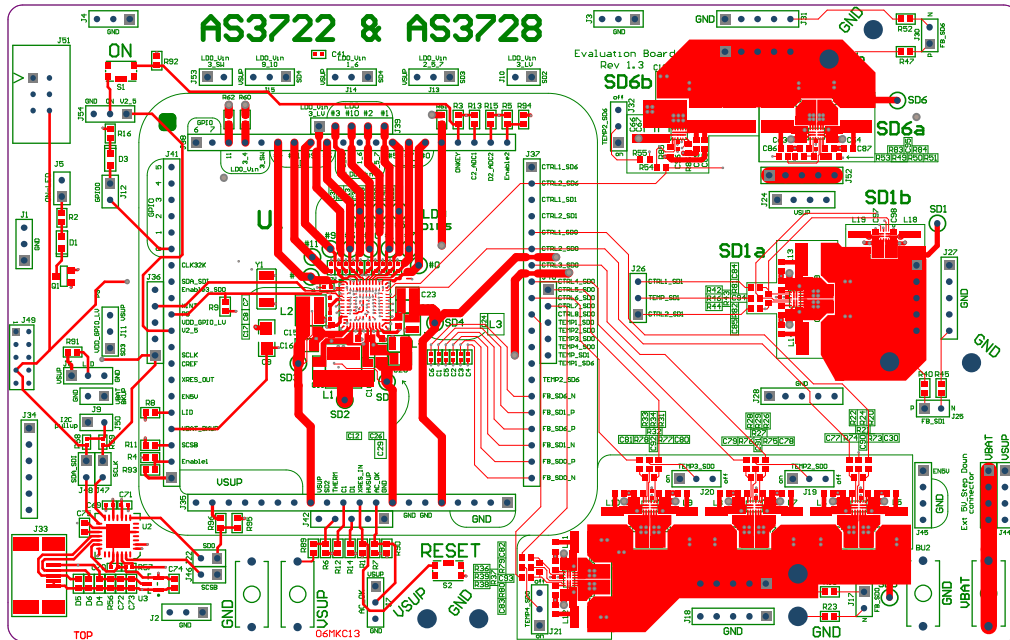


Figure 13: Layer INNER1 - SIGNAL1 & GND

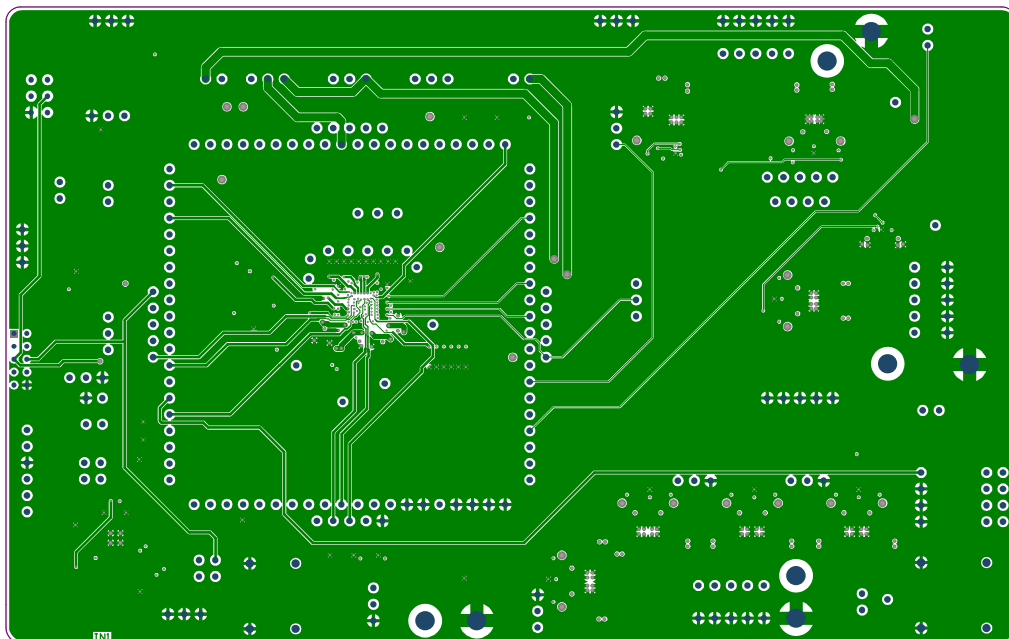


Figure 14: Layer INNER2 - GND

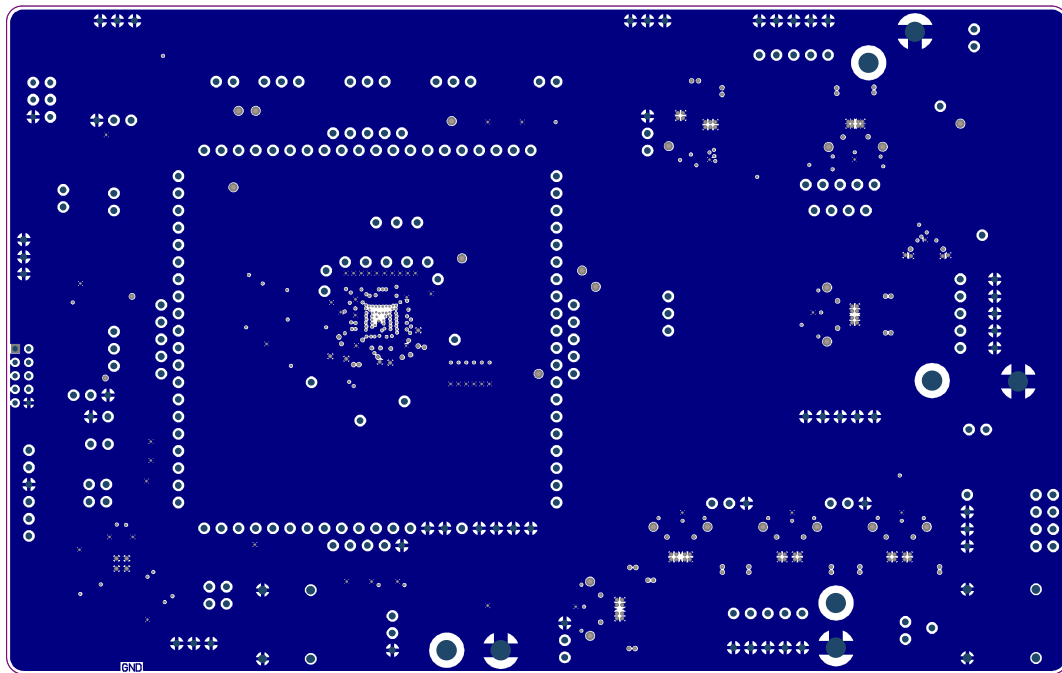


Figure 15: Layer INNER3 - VSUP

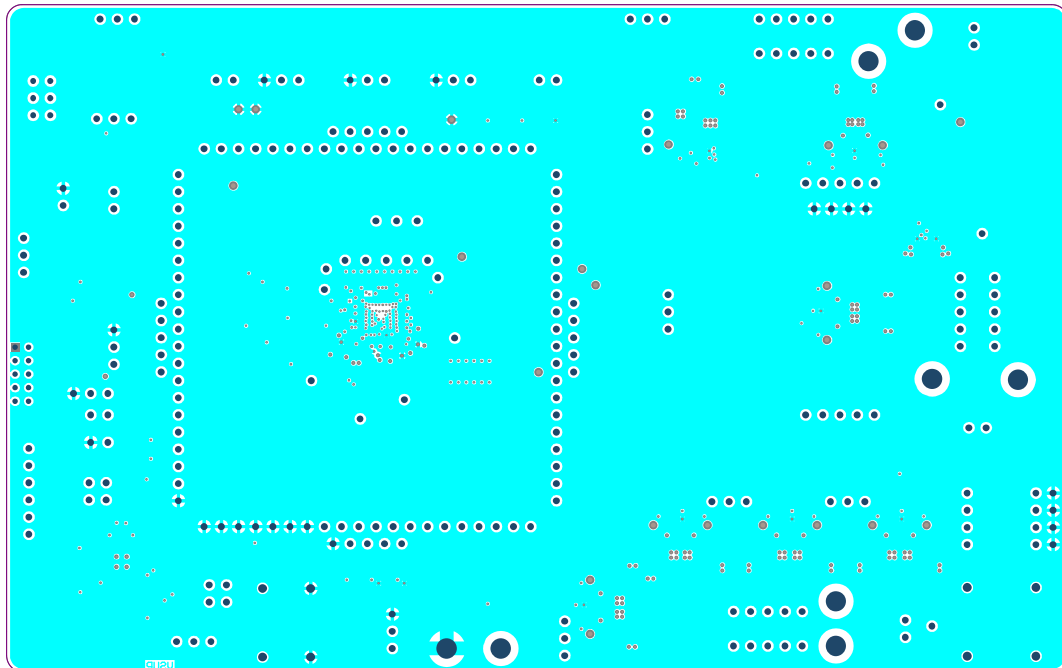


Figure 16: Layer INNER4 - SIGNAL2 &amp; GND

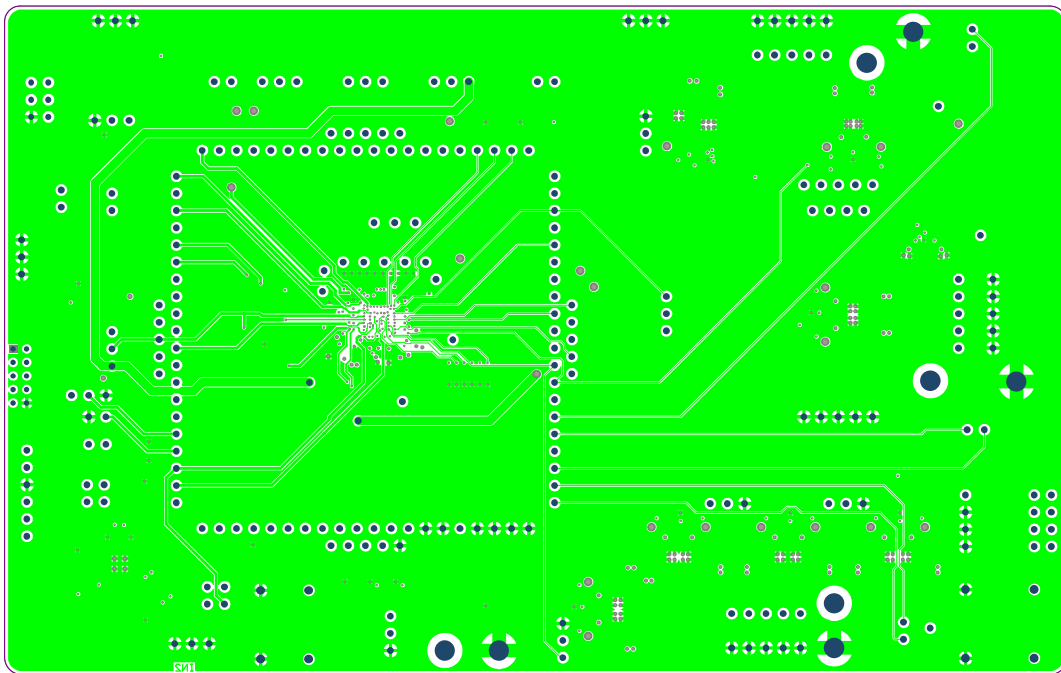
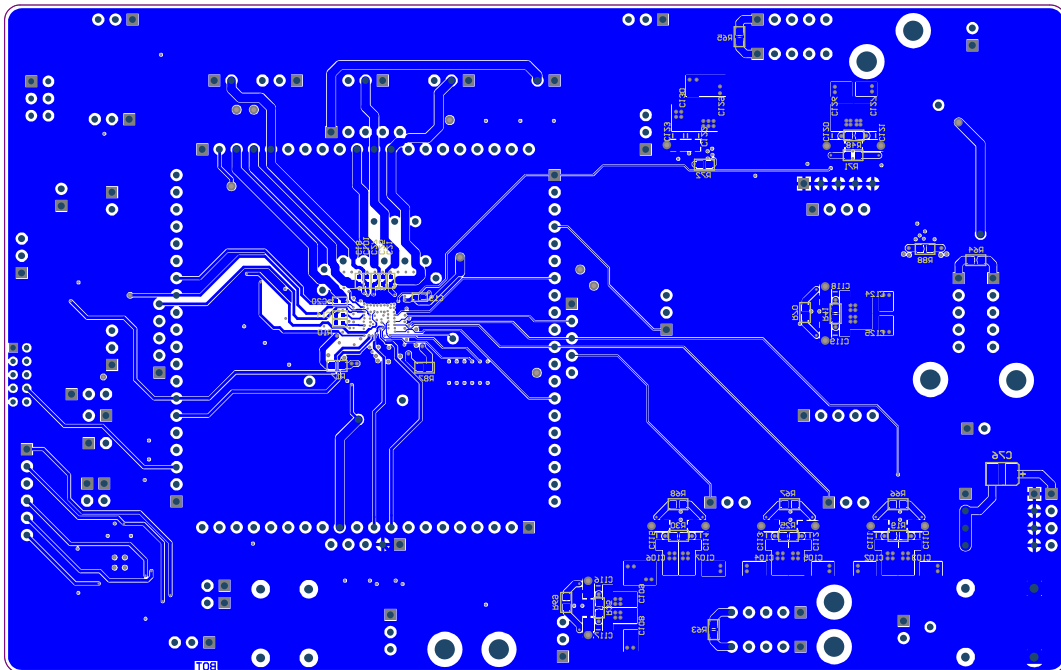


Figure 17: Bottom Layer &amp; Silk



## 5.3 BOM

Figure 18: Bill of Material

| Bill of Materials    |                                                                                                                                                                                                                            |                       |                                                                          |                                  |                          |          |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------|----------------------------------|--------------------------|----------|
| AS3722 Evalboard BGA |                                                                                                                                                                                                                            |                       |                                                                          |                                  |                          |          |
| Company:             |                                                                                                                                                                                                                            | ams AG                |                                                                          |                                  |                          |          |
| Originator:          |                                                                                                                                                                                                                            | mkc                   |                                                                          |                                  |                          |          |
| PCB Name:            |                                                                                                                                                                                                                            | AS3722 Evalboard BGA  |                                                                          |                                  |                          |          |
| PCB Version:         |                                                                                                                                                                                                                            | 1.3                   |                                                                          |                                  |                          |          |
| Report Date:         |                                                                                                                                                                                                                            | 13.08.2014            |                                                                          |                                  |                          |          |
| #                    | Designator                                                                                                                                                                                                                 | Comment               | Component Description                                                    | Manufacturer                     | Manufacturer Part Number | Quantity |
| 1                    | BUI, BUI1                                                                                                                                                                                                                  | VBAT, VSUP            | HIRSCHMANN TEST AND MEASUREMENT - MPB1 RED - MINI-PRUEFUEHSE ROT         | HIRSCHMANN TEST AND MEASUREMENT  | MPB1 RED                 | 2        |
| 2                    | BU2, BU12                                                                                                                                                                                                                  | GND                   | HIRSCHMANN TEST AND MEASUREMENT - MPB1 BLACK - MINI-PRUEFUEHSE SW        | HIRSCHMANN TEST AND MEASUREMENT  | MPB1 BLACK               | 2        |
| 3                    | C1, C2, C3, C4, C5, C6                                                                                                                                                                                                     | 100p                  | MURATA - GRM1555C1H10J1001D - KONDENSATOR, 0402, 100PF, 50V              | MURATA                           | GRM1555C1H10J1001D       | 6        |
| 4                    | C7, C13, C14, C18, C19, C20, C21, C25, C27, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C50, C51, C52, C93, C94, C95, C96, C101                                                                                 | 1u                    | MURATA - GRM1555R61A105KE15D - KONDENSATOR, 0402, 1.0UF, 10V             | MURATA                           | GRM1555R61A105KE15D      | 28       |
| 5                    | C8, C69, C70, C71                                                                                                                                                                                                          | 100n                  | MURATA - GRM1555R71A104KA01D - CAPACITOR, 0402, X7R, 10V, 100NF          | MURATA                           | GRM1555R71A104KA01D      | 4        |
| 6                    | C9                                                                                                                                                                                                                         | 100u                  | MURATA - GRM15CR60J107ME99L - KONDENSATOR, 1206, 100UF, 6.3V             | MURATA                           | GRM15CR60J107ME99L       | 1        |
| 7                    | C10, C11, C15, C22, C28                                                                                                                                                                                                    | 22u                   | CAP CER 22UF 6.3V 20% XSR 0805                                           | Taiyo Yuden                      | JMK212B1226MD-T          | 5        |
| 8                    | C12, C17, C24, C26                                                                                                                                                                                                         | 2u2                   | CAP CER 2.2UF 10V 10% X7R 0603                                           | Murata Electronics North America | GRM188R71A225KE15D       | 4        |
| 9                    | C30, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89                                                                                                                                                       | 100n                  | CAP CER 0.1UF 16V 10% X7R 0603                                           | Murata Electronics North America | GRM188R71C104KA01D       | 14       |
| 10                   | C42, C45, C48, C49, C50, C53, C54, C57, C58, C61, C62, C65, C68, C103, C105, C107, C109, C124, C127, C128, C129                                                                                                            | 47u                   | CAP CER 47UF 6.3V 20% XSR 0805                                           | Taiyo Yuden                      | JMK212B1476MG-T          | 21       |
| 11                   | C43, C44, C47, C48, C51, C52, C55, C56, C59, C60, C63, C64, C66, C67, C110, C111, C112, C113, C114, C115, C116, C117, C118, C119, C120, C121, C122, C123                                                                   | 10u                   | CAP CER 10UF 25V 10% XSR 1206                                            | Taiyo Yuden                      | TMK316AB1106KD-T         | 28       |
| 12                   | C72                                                                                                                                                                                                                        | 100nF                 | MURATA - GRM188R71E104KA01D - CAPACITOR, 0603, X7R, 25V, 100NF           | MURATA                           | GRM188R71E104KA01D       | 1        |
| 13                   | C73, C74                                                                                                                                                                                                                   | 1uF                   | MURATA - GRM188R71E105KA12D - KONDENSATOR, 0603, 1.0UF, 25V              | MURATA                           | GRM188R71E105KA12D       | 2        |
| 14                   | C75                                                                                                                                                                                                                        | 10u                   | MURATA - GRM188R60J106ME47D - KONDENSATOR, 0603, 10UF, 6.3V              | MURATA                           | GRM188R60J106ME47D       | 1        |
| 15                   | C76                                                                                                                                                                                                                        | 100uF                 | AVX - TPSB107M010R0400 - KONDENSATOR, BAUF, B, 100 UF, 10V               | AVX                              | TPSB107M010R0400         | 1        |
| 16                   | D1, D3                                                                                                                                                                                                                     | LED                   | AVAGO TECHNOLOGIES - HSMW-C191 - LED, SMD WEISS                          | AVAGO TECHNOLOGIES               | HSMW-C191                | 2        |
| 17                   | D4, D5, D6                                                                                                                                                                                                                 | ESD                   | COOPER BUSSMANN - 0603ESDA-TR1 - DIODE TVS, BL24V, 0603                  | COOPER BUSSMANN                  | 0603ESDA-TR1             | 3        |
| 18                   | J1, J2, J3, J5, J9, J10, J11, J12, J13, J14, J15, J16, J17, J18, J19, J20, J21, J23, J25, J27, J29, J30, J31, J32, J35, J36, J37, J38, J39, J40, J41, J42, J43, J44, J45, J47, J48, J50, J53                               | Jumper_THMD           | FSCHER ELEKTRONIK - SL11 124 36G - STIFTLISTE, 36POL, 2.54MM RASTER      | FSCHER ELEKTRONIK                | SL11 124 36G             | 39       |
| 19                   | J6, J7, J54                                                                                                                                                                                                                | LID, A/C_OK, ONKEY    | FSCHER ELEKTRONIK - SL11 124 36G - STIFTLISTE, 36POL, 2.54MM RASTER      | FSCHER ELEKTRONIK                | SL11 124 36G             | 3        |
| 20                   | J33                                                                                                                                                                                                                        | USB_AB_MINI_SMD_MOLEX | MOLEX - 548190572 - BUCHSE, USB, MINI-B, SMT                             | MOLEX                            | 548190572                | 1        |
| 21                   | L1, L2                                                                                                                                                                                                                     | 0.47u                 | INDUCTOR POWER 0.47UH 20% SMD                                            | TDK Corporation                  | SPW4015T-R47M            | 2        |
| 22                   | L3, L4                                                                                                                                                                                                                     | 1u                    | INDUCTOR 1.0UH 20% 1008                                                  | TDK                              | TFM252010GH4-1R0MTAA     | 2        |
| 23                   | L5, L6, L7, L8, L9, L10, L11, L12, L13, L14, L15, L16, L17, L20                                                                                                                                                            | 0.68u                 | INDUCTOR POWER 68UH SMD                                                  | TDK                              | SPW4015T-R68             | 14       |
| 24                   | Q1                                                                                                                                                                                                                         | SI0304                | VISHAY SILICONIX - SI0304BDL-T1-E3 - N-CHANNEL MOSFET, 30V, 900mA, SC-70 | VISHAY SILICONIX                 | SI0304BDL-T1-E3          | 1        |
| 25                   | R1, R3, R5, R6, R7, R8, R11, R12, R13, R14, R15, R93, R95                                                                                                                                                                  | 1M                    | BOURNS - CR0603-3W-105GLF - WIDERSTAND 0603, 1M5%, 0.1W                  | BOURNS                           | CR0603-3W-105GLF         | 13       |
| 26                   | R2                                                                                                                                                                                                                         | 1k                    | BOURNS - CR0603-3W-102GLF - WIDERSTAND 0603, 1K5%, 0.1W                  | BOURNS                           | CR0603-3W-102GLF         | 1        |
| 27                   | R9, R56                                                                                                                                                                                                                    | 100k                  | BOURNS - CR0603-FX-1003ELF - WIDERSTAND 0603, 100K 1%, 0.1W              | BOURNS                           | CR0603-FX-1003ELF        | 2        |
| 28                   | R10                                                                                                                                                                                                                        | 220k                  | MULTICOMP - MC0.0625W 0402 1% 220K - WIDERSTAND, 0402 1% 220K            | MULTICOMP                        | MC0.0625W 0402 1% 220K   | 1        |
| 29                   | R16                                                                                                                                                                                                                        | 270                   | VISHAY DRALORIC - CRCW0603270RFKEAHP - WIDERSTAND, 0603, 1%, 270R        | VISHAY DRALORIC                  | CRCW0603270RFKEAHP       | 1        |
| 30                   | R18, R20, R22, R23, R24, R26, R28, R29, R31, R33, R34, R36, R38, R39, R40, R42, R44, R45, R46, R47, R48, R49, R50, R52, R53, R54, R55, R60, R61, R62, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86 | 0R                    | VISHAY DRALORIC - CRCW0603000020EA - RESISTOR, 0603, 0R, 0.1W, 1%        | VISHAY DRALORIC                  | CRCW0603000020EA         | 44       |
| 31                   | R57                                                                                                                                                                                                                        | 10k                   | VISHAY DRALORIC - CRCW040210K0FKEAHP - WIDERSTAND, 0402, 1%, 10K         | VISHAY DRALORIC                  | CRCW040210K0FKEAHP       | 1        |
| 32                   | R58, R59                                                                                                                                                                                                                   | 8k2                   | VISHAY DRALORIC - CRCW04028K20FKEAHP - WIDERSTAND, 0402, 1%, 8k2         | VISHAY DRALORIC                  | CRCW04028K20FKEAHP       | 2        |
| 33                   | R63                                                                                                                                                                                                                        | 20k                   | MULTICOMP - MC0.063W 0603 1% 20K - WIDERSTAND, 0603 20K                  | MULTICOMP                        | MC0.063W 0603 1% 20K     | 1        |
| 34                   | R64                                                                                                                                                                                                                        | 82k                   | MULTICOMP - MC0.063W 0603 1% 82K - WIDERSTAND, 0603 82K                  | MULTICOMP                        | MC0.063W 0603 1% 82K     | 1        |
| 35                   | R65                                                                                                                                                                                                                        | 39k                   | MULTICOMP - MC0063W0603139K - WIDERSTAND, 0603 39K                       | MULTICOMP                        | MC0063W0603139K          | 1        |
| 36                   | S1, S2                                                                                                                                                                                                                     | ON, Reset             | SWITCH TACTILE SPST-NO 0.05A 32V                                         | C&K Components                   | KMR211GLFS               | 2        |
| 37                   | SD00, SD01, SD0c, SD0d, SD1a, SD6a, SD6b                                                                                                                                                                                   | AS3722                | VERO - 20-313137 - LOTSTUTZPUNKT ROT BIS MAX 475° 100ST                  | VERO                             | AS3722-BWLT              | 7        |
| 38                   | TP1, TP3, TP4, TP5, TP6, TP7, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20                                                                                                                        | AS3722                | VERO - 20-313137 - LOTSTUTZPUNKT ROT BIS MAX 475° 100ST                  | VERO                             | 20-313137                | 19       |
| 39                   | U1                                                                                                                                                                                                                         | AS3722                | AS3722                                                                   | AS3722                           | AS3722-BCTT-00           | 1        |
| 40                   | U2                                                                                                                                                                                                                         | PC124FJ64GB002        | MICROCHIP - PC124FJ64GB002-IML - MCU 16BIT, 64K FLASH, USB-OTG, 28QFN    | MICROCHIP                        | PC124FJ64GB002-IML       | 1        |
| 41                   | U3                                                                                                                                                                                                                         | AS1369                | CLD0150MA 3.3V SOT23-3                                                   | ams AG                           | AS1369-33-T              | 2        |
| 42                   | Y1                                                                                                                                                                                                                         | CRYSTAL               | CRYSTAL 32.768KHZ 7HF SMD                                                | Citizen Finetech Myota           | CME19-32.768KZYT         | 1        |
| Approved             |                                                                                                                                                                                                                            | Notes                 |                                                                          |                                  |                          | 266      |

Note: Populated components may vary!

## 6 Ordering & Contact Information

The AS3722 Evaluation Kit can be ordered via [www.ams.com](http://www.ams.com).

| Ordering Code             | Description                    |
|---------------------------|--------------------------------|
| AS3722-CT-00_EK_ST AS3728 | AS3722 Eval Kit Standard Board |

**Buy our products or get free samples online at:**

[www.ams.com/ICdirect](http://www.ams.com/ICdirect)

**Technical Support is available at:**

[www.ams.com/Technical-Support](http://www.ams.com/Technical-Support)

**Provide feedback about this document at:**

[www.ams.com/Document-Feedback](http://www.ams.com/Document-Feedback)

**For further information and requests, e-mail us at:**

[ams\\_sales@ams.com](mailto:ams_sales@ams.com)

**For sales offices, distributors and representatives, please visit:**

[www.ams.com/contact](http://www.ams.com/contact)

### Headquarters

ams AG

Tobelbaderstrasse 30

8141 Unterpremstaetten

Austria, Europe

Tel: +43 (0) 3136 500 0

Website: [www.ams.com](http://www.ams.com)

## 7 Copyrights & Disclaimer

Copyright ams AG, Tobelbader Strasse 30, 8141 Unterpremstaetten, Austria-Europe. Trademarks Registered. All rights reserved. The material herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner.

Demo Kits, Evaluation Kits and Reference Designs are provided to recipient on an “as is” basis for demonstration and evaluation purposes only and are not considered to be finished end-products intended and fit for general consumer use, commercial applications and applications with special requirements such as but not limited to medical equipment or automotive applications. Demo Kits, Evaluation Kits and Reference Designs have not been tested for compliance with electromagnetic compatibility (EMC) standards and directives, unless otherwise specified. Demo Kits, Evaluation Kits and Reference Designs shall be used by qualified personnel only.

ams AG reserves the right to change functionality and price of Demo Kits, Evaluation Kits and Reference Designs at any time and without notice.

Any express or implied warranties, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose are disclaimed. Any claims and demands and any direct, indirect, incidental, special, exemplary or consequential damages arising from the inadequacy of the provided Demo Kits, Evaluation Kits and Reference Designs or incurred losses of any kind (e.g. loss of use, data or profits or business interruption however caused) as a consequence of their use are excluded.

ams AG shall not be liable to recipient or any third party for any damages, including but not limited to personal injury, property damage, loss of profits, loss of use, interruption of business or indirect, special, incidental or consequential damages, of any kind, in connection with or arising out of the furnishing, performance or use of the technical data herein. No obligation or liability to recipient or any third party shall arise or flow out of ams AG rendering of technical or other services.

## 8 Revision Information

Initial version 1-00