CUSTOMER DESIGN-IN FLOWCHART GUIDELINE FOR i.MX6Q/D BASED PLATFORM WITH DA9063

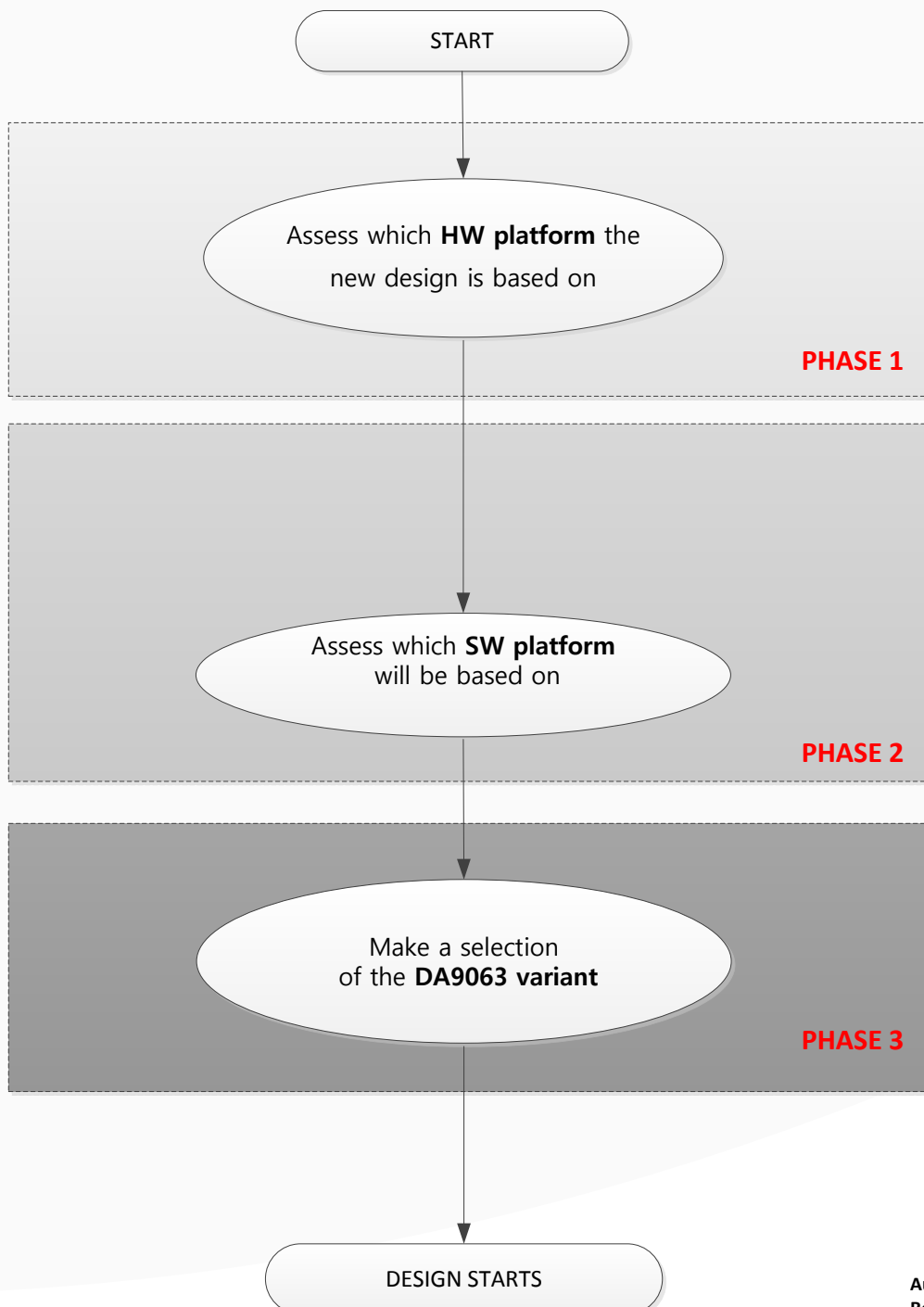## ASSESSMENT: CUSTOMER REQUIREMENTS

Purpose: guideline aimed to make the best choice of HW platform, SW platform and DA9063B OTP variants for an i.MX6 Q/D based platform

Scope: DA9063B variants and i.MX6 Q/D processors

Reference documentation from DIALOG customer portal https://support.diasemi.com:
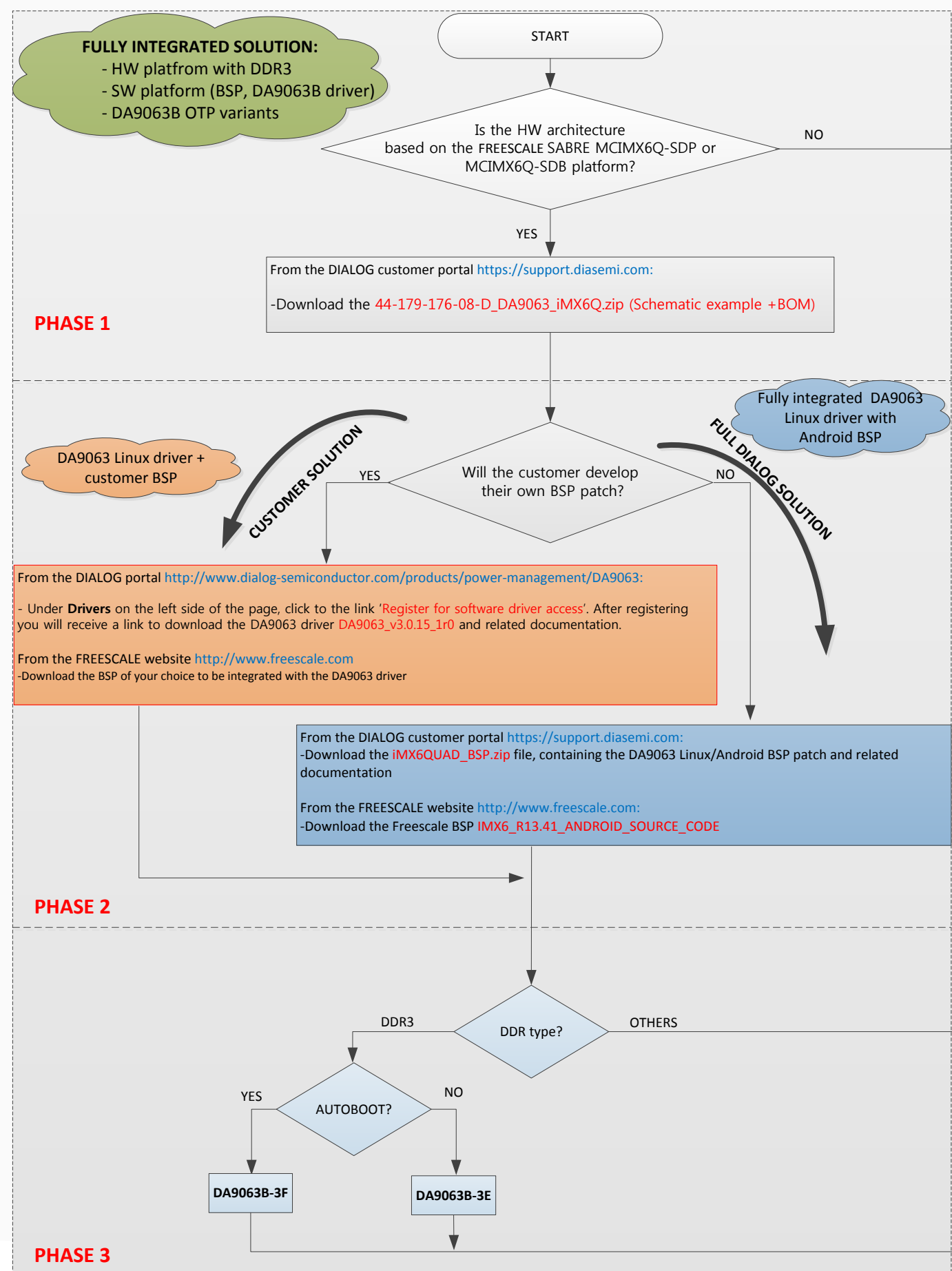- DA9063_iMX6 standard variant factsheet
- AN-PM-027 DA9063 power management for iMX6 platforms V1.0
- DA9063_iMX6Q_schematic_BOM_example

START

Assess which **HW platform** the new design is based on

PHASE 1

Assess which **SW platform** will be based on

PHASE 2

Make a selection of the **DA9063 variant**

PHASE 3

DESIGN STARTS

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DECISION: Choose the best DA9063B OTP variant

dialog SEMICONDUCTOR

FREESCALE SABRE BASED SYSTEM SOLUTION

GENERIC BASIC SYSTEM SOLUTION

FULLY INTEGRATED SOLUTION:
- HW platfrom with DDR3
- SW platform (BSP, DA9063B driver)
- DA9063B OTP variants

START

Is the HW architecture based on the FREESCALE SABRE MCIMX6Q-SDP or MCIMX6Q-SDB platform?

NO

YES

BASIC SOLUTION:
DA9063B variants (A, B, C, D) to only power-up:
- i.MX6 Q/D processor
- DDR3 or LPDDR2 memories
Other supplies to be enabled in application via I2C write

PHASE 1

From the DIALOG customer portal https://support.diasemi.com:

-Download the 44-179-176-08-D_DA9063_iMX6Q.zip (Schematic example +BOM)

Agree architecture and functions/ features requirements with customer

Select the DA9063 OTP variant according to HW architecture and features requirements

Fully integrated DA9063 Linux driver with Android BSP

DA9063 Linux driver + customer BSP

CUSTOMER SOLUTION

Will the customer develop their own BSP patch?

FULL DIALOG SOLUTION

YES

NO

Variant available ?

NO

YES

From the DIALOG portal http://www.dialog-semiconductor.com/products/power-management/DA9063:

- Under **Drivers** on the left side of the page, click to the link 'Register for software driver access'. After registering you will receive a link to download the DA9063 driver DA9063_v3.0.15_1r0 and related documentation.

From the FREESCALE website http://www.freescale.com
-Download the BSP of your choice to be integrated with the DA9063 driver

Please contact a DIALOG Sales representative

From the DIALOG customer portal https://support.diasemi.com:
-Download the iMX6QUAD_BSP.zip file, containing the DA9063 Linux/Android BSP patch and related documentation

From the FREESCALE website http://www.freescale.com:
-Download the Freescale BSP IMX6_R13.41_ANDROID_SOURCE_CODE

DDR type?

DDR3

LPDDR2

PHASE 2

Solution agreed?

YES

NO

AUTOBOOT?

NO

YES

AUTOBOOT?

NO

YES

DA9063B-3A

DA9063B-3C

DA9063B-3B

DA9063B-3D

DDR type?

DDR3

OTHERS

PHASE 3

YES

AUTOBOOT?

NO

DA9063B-3F

DA9063B-3E

Rework design to use available variants

DESIGN STARTS