ALP LAB

E1M-X V2N-M1 Conflict Minerals Declaration

3TG due diligence — CMRT companion statement

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Table of Contents

1 Declaration . . . 3
2 Scope & Regulatory Framework . . . 3
3 3TG Content Analysis . . . 3
4 Due-Diligence Approach . . . 3
5 Supplier CMRT Collection Basis . . . 3
6 Declaration Level . . . 5
7 Smelter / Refiner List . . . 5
8 Extended Minerals (EMRT) . . . 5
9 Limitations . . . 5
10 Authorisation . . . 5
11 Revision History . . . 5

List of Tables

Table 1 3TG presence in the E1M-X V2N-M1 module . . . 3
Table 2 Component-supplier CMRT collection tracker . . . 3
Table 3 CMRT declaration options . . . 5
Table 4 Document revision history . . . 5

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1 Declaration

Conflict Minerals Declaration **Alp Lab AB** is committed to the responsible sourcing of **tin, tantalum, tungsten and gold (3TG)** used in the **E1M-X V2N-M1 System-on-Module**. Alp Lab's exposure is entirely downstream, through the electronic components in the module. Diligence is aligned with the **OECD Due Diligence Guidance** and the **Responsible Minerals Initiative (RMI)**, reported via the **RMI Conflict Minerals Reporting Template (CMRT)**.

Status of this issue: **Preliminary.** The 3TG content analysis (Section 3) is complete from the BOM. The smelter list (Section 7) and the customer-facing CMRT XLSX are finalised once the supplier CMRTs in Section 5 are collected and rolled up.

2 Scope & Regulatory Framework

Covers the assembled E1M-X V2N-M1 module. Addresses conflict-minerals obligations under **US Dodd-Frank §1502**, **EU Conflict Minerals Reg. (EU) 2017/821**, the **OECD Due Diligence Guidance**, and the **RMI CMRT / RMAP**.

3 3TG Content Analysis

Derived from the released BOM (1303 placements, 98 line items) and the Pb-free SAC assembly.

Mineral	Present	Primary source	Where in the module
Tin (Sn)	Yes	SAC solder + terminations	Assembly solder and tin-plated terminations of every placement — board-wide
Gold (Au)	Yes	Finishes + bond wires	IC/SoC/accelerator bond wires; BGA/QFN/WLCSP finishes; gold-plated connector contacts
Tungsten (W)	Trace	IC die metallization	Tungsten plugs/vias inside IC silicon; via supplier CMRT
Tantalum (Ta)	No	—	Not intentionally present — all decoupling is ceramic MLCC; **no tantalum capacitors** in the BOM

Table 1 3TG presence in the E1M-X V2N-M1 module

Note: **Key simplification:** the V2N-M1 contains **no tantalum** (all ceramic MLCC decoupling). The tantalum row is declared "not contained". Tin and gold are the materially-present 3TG; tungsten is trace. The lithium supercapacitor (RTC backup) and the LPDDR/flash/accelerator devices contain no tantalum.

4 Due-Diligence Approach

Alp Lab cascades the CMRT request to suppliers and aggregates declared smelters: collect a current RMI CMRT from each supplier (Section 5); aggregate the declared Sn/W/Au smelters; screen each against the **RMI RMAP conformant-smelter list**; report on the RMI CMRT XLSX, re-issued as data and the RMAP list change.

5 Supplier CMRT Collection Basis

The module smelter list is a roll-up of supplier CMRTs. Tantalum-only sources are not applicable (no tantalum). Every supplier is a potential tin source (terminations); IC/connector/SoC suppliers are gold sources.

Manufacturer	Material 3TG	CMRT on file
Renesas	Sn, Au, W	Locate

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Manufacturer	Material 3TG	CMRT on file
DeepX	Sn, Ta, Au, W	On file · CMRT 6.5
Micron Technology	Sn, Au, W	Locate
Texas Instruments	Sn, Au, W	Locate
Realtek	Sn, Au, W	Locate
Qorvo	Sn, Au, W	Locate
Macronix	Sn, Au, W	Locate
Winbond Electronics	Sn, Au, W	Locate
Kingston Technology	Sn, Au, W	Locate
Infineon	Sn, Au, W	Locate
GigaDevice	Sn, Au, W	Locate
Analog Devices	Sn, Au, W	Locate
Rohm Semiconductor	Sn, Au, W	Locate
Nexperia	Sn, Au, W	Locate
onsemi	Sn, Au, W	Locate
STMicroelectronics	Sn, Au, W	Locate
Toshiba Elec. Devices	Sn, Au, W	Locate
Diodes Incorporated	Sn, Au, W	Locate
Microchip Technology	Sn, Au, W	Locate
Kinetic Technologies	Sn, Au, W	Locate
Murata Electronics	Sn, Au	Locate
TDK Corporation	Sn, Au	Locate
Yageo / Vishay / AVX	Sn, Au	Locate
Samsung Electro-Mechanics	Sn, Au	Locate
Taiyo Yuden	Sn, Au	Locate
Würth Elektronik	Sn, Au	Locate
Abracon / TKD / ECS	Sn, Au	Locate
Micro Crystal / Seiko	Sn, Au	Locate
Samtec	Sn, Au	Locate
Delta / Cyntec	Sn, Au	Locate

Table 2 Component-supplier CMRT collection tracker

Note: Most suppliers publish a company-level RMI CMRT on their compliance/CSR pages. The **DeepX** row is now closed: DeepX supplied a **product-scoped RMI CMRT (template v6.5)** for the DX-M1 covering all four 3TG, declaring ~ 208 smelters/refiners and stating that all sourcing — including from covered countries or CAHRAs — is from **RMAP-validated conformant smelters**, plus an **RMI EMRT (v2.1)** for extended minerals (see Section 8). DeepX's IC-level CMRT covers **tantalum** as a standard full-3TG declaration; the module itself carries no tantalum capacitors, so tantalum remains not-intentionally-present at module level (any tantalum confined to trace IC die metallization). Sources maintained in `supplier-cmrt-index.md`.

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6 Declaration Level

Level	Description
Company (default)	A single Alp Lab AB CMRT across all products. Lower maintenance, recommended.
Product	A CMRT scoped to the V2N-M1 smelter roll-up. Available on request.

Table 3 CMRT declaration options

7 Smelter / Refiner List

> **Note: Pending supplier CMRT collection.** The aggregated Sn/W/Au smelter list — each with its RMI Standard Smelter ID and RMAP conformance status — is populated here once the supplier CMRTs in Section 5 are received. The tantalum section is declared **not contained**.

8 Extended Minerals (EMRT)

Beyond 3TG, the **RMI Extended Minerals Reporting Template (EMRT)** covers cobalt and mica (and, in v2.1, copper, lithium, nickel). These are relevant to the V2N-M1 through its LPDDR/eMMC devices, PMICs, and the lithium RTC-backup supercapacitor. DeepX supplied an **RMI EMRT (v2.1)** for the DX-M1 declaring **cobalt, copper, mica and nickel present** (lithium not present), with due diligence ongoing on a portion of the mica sub-tier supply chain. Alp Lab aggregates supplier EMRTs alongside the CMRTs; the module-level extended-minerals roll-up is issued with the smelter list.

9 Limitations

1. **Downstream declaration** — only as complete as the supplier CMRTs aggregated.
2. **Per-revision / periodic re-issue** — on BOM change and as RMAP/CMRTs update.
3. **XLSX is the formal artifact** — this document is the companion statement.

10 Authorisation

Signed for and on behalf of **Alp Lab AB**:

_____

Signature

Name: _____

Title: _____

Date: _____

Place: _____

11 Revision History

Revision	Changes	Date
0.1	• Initial preliminary declaration with BOM-derived 3TG content analysis (no tantalum; Sn/Au material, W trace) and the supplier CMRT collection tracker (35 suppliers; DeepX by request). • Awaiting CMRTs and smelter roll-up.	June 2026

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Revision	Changes	Date
0.2	• DeepX CMRT received and filed — product-scoped RMI CMRT v6.5 (all 3TG, 208 smelters, RMAP-conformant sourcing) plus RMI EMRT v2.1 (cobalt/copper/mica/nickel). • DeepX tracker row closed • added the Extended Minerals (EMRT) section. • Clarified tantalum is IC-die-trace only (no tantalum capacitors at module level).	July 2026
0.3	• Release history: every entry formatted as a bullet list.	October 2026
0.4	• Table of Contents: each entry links to its section; the front-matter lists are set tighter.	October 2026
0.5	• Product name on page 1 links to the product page on alplab.ai.	November 2026

Table 4 Document revision history

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