

# **TIM HW/SW equipment reference for FTTx deployment in access network**

*Rev. 1.0 06/11/2018*

## INDEX

1	SCOPE .....	3
2	VDSL2 ONUS FOR TIM FTTCAB AND FTTEX DEPLOYMENT.....	4
3	ATM ADSL DSLAM FOR TIM FTTE DEPLOYMENT.....	6
4	IP ADSL DSLAM FOR TIM FTTE DEPLOYMENT .....	8
5	IP ADSL MSAN FOR TIM FTTCAB DEPLOYMENT .....	10

## 1 SCOPE

This document provided by TIM, defines the technical details, in term of HW and SW releases, of the devices used in FTTx TIM access deployment, focusing on the xDSL interfaces.

In the lists of this document, ONU devices for the VDSL2 FTTCab/FTTEx deployment, as well as ADSL DSLAM (IP and ATM) for Exchange and MSAN for FTTCab, are reported.

The aim of this document is for providing information to all external entities (i.e. Operators, system vendors, ecc.) who will interact, with their devices (i.e. CPE), to TIM access network. Knowledge of TIM network HW and SW equipment will hopefully facilitate all those activities, the vendors will conduct, for reaching that level of xDSL interoperability, necessary for guaranteeing a good quality and stability of all the copper cable environment.

Equipment SW and HW releases reported in this document, are updated to the its publication date.

The present document does not describe any specific terminal equipment (TE) requirements. It does not aim to derive requirements for the network of TIM.

## 2 VDSL2 ONUS FOR TIM FTTCAB AND FTTEX DEPLOYMENT

This section describes the HW/SW list of the VDSL2 ONUs equipment for TIM FTTx deployment, divided by vendor.

Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
Nokia	iSAM 7356	NDLT-C	VDSL2 8b, 17a	BCM 65300	48	5.6.02	VE_11_3_38
		NDLT-K	VDSL2 17a, 35b	BCM 65200	48		VE_12_0_22
	iSAM 7367	Integrated in the box (same as card NDLT-C)	VDSL2 17a	BCM 65300	48	5.1.01f	VE_11_1_71
	iSAM 7367	Integrated in the box (same as card NDLT-C)	VDSL2 17a	BCM 65300	48	5.6.02 (*)	VE_11_3_38
	iSAM7363	RDLT-A (High Power)	VDSL2 8b, 17a	BCM 65300	32	5.6.02f	VE_11_3_38
		RDLT-B (Low Power)	VDSL2 8b, 17a	BCM 65200	32		VE_12_0_22
		RDLT-D (EVDSL)	VDSL2 17a, 35b	BCM 65200	32		VE_12_0_22

(\*) next introduction in field

Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
Huawei	<b>MA5623A</b>	Integrated in the box	VDSL2 17a	BCM 65300	48	V800R016C00SPH207	10.9.19
	<b>MA5611S</b>	Integrated in the box	VDSL2 17a	BCM 65300	48	V800R016C00SPH207	10.9.19
	<b>MA5616</b>	H83BVCMM (High Power)	VDSL2 8b, 17a	BCM 65300	48	V800R017C10SPH207	10.09.26
		H83DVCMM (Low Power)	VDSL2 8b, 17a	BCM 65238	48		12.0.20
		H83DSDMM (ver.A) (EVDSL)	VDSL2 17a, 35b	BCM 65235 C0	48		12.0.20
H83DSDMM1 (ver.B) (EVDSL)	VDSL2 17a, 35b	BCM 65235 D0	48	12.0.20			

Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
Selta	<b>SAMBHA48</b>	Integrated in the box	VDSL2 17a	BCM 65300	48	0.4.21-p1	11.00.25
	<b>SAMBHA200</b>	32VDSL (Low Power)	VDSL2 17a	BCM 65230	32	0.5.14-p2	11.03.26
		32VDSL (EVDSL)	VDSL2 17a, 35b	BCM 65235	32	0.5.14-p2	12.00.26

### 3 ATM ADSL DSLAM FOR TIM FTTE DEPLOYMENT

This section describes the HW/SW list of the ADSL ATM DSLAM equipment for TIM FTTE deployment, divided by vendor.

Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
Siemens	hiX5300 e M200	SUADSL - 64PXA IFX	ADSL1/2/2+	Infineon	64	1.2.2.122	V_07.11.0a.27
		SUADSL - 64PX IFX BIS	ADSL1	Infineon	64		V_3.19.04.45
		SUADSL - 64P IFX	ADSL1	Infineon	64		V_01.58
		SUADSL - 64P TI	ADSL1	Infineon	64		V_P_0.11.0
		SUSHDSL - 32P	SHDSL	Infineon	32		5.8.14

Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
Nokia	ASAM 7300	ADLT-J	ADSL1	Alcatel/STM SACHEM	12	4.6	GFD5AA46.081
		ADLT-L	ADSL1	Alcatel/STM SACHEM	24		LBTEAA46.081
		ABLT-E	ADSL1/2/2+	BCM 6411	48		L7D7AA46.081
		ABLT-D	ADSL1/2/2+	BCM 6411	24		L7D6AA46.080
	ASAM 7301	ADLT-J	ADSL1	Alcatel/STM SACHEM	12	5.1	LYAJAA51.353
		ADLT-L	ADSL1	Alcatel/STM SACHEM	24		LYAJAA51.353
		ABLT-E	ADSL1/2/2+	BCM 6411	48		LYAJAA51.353

Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
Marconi	AXH600	32xADSL	ADSL1	Texas Instruments AC4000	32	5.15.4	3.24
		32xADSL	ADSL1	Texas Instruments AC5	32		4.20
	AXH600E	48xADSL	ADSL1	Texas Instruments AC5	48	5.59.5	4.20
		60xADSL	ADSL1/2/2+	Centillium Maximus 2	60		33.12

#### 4 IP ADSL DSLAM FOR TIM FTTE DEPLOYMENT

This section describes the HW/SW list of the ADSL IP DSLAM equipment for TIM FTTE deployment, divided by vendor.

Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
Siemens	hiX5630	IU_ADSL48	ADSL1/2/2+	Conexant	48	2.3 APS025TI	67.4.90
		IU_ADSL72	ADSL1/2/2+	Infineon	72		7.17.02.0.27
	HiX5635/hiX5630	IU_ADSL48	ADSL1/2/2+	Conexant	48	2.8 APS092.030	67.4.128a
		IU_ADSL72	ADSL1/2/2+	Infineon	72		FW_GEMINAX-08-27-07-0-2E

Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
Nokia	7302FD	NALT-J	ADSL1/2/2+	BCM 6518/6522	48	5.3.02e	V13.8.0
		NSLT-A	SHDSL	IFX_SHDSL	24		V2.1.2
		NSLT-C	SHDSL	IFX_SHDSL	24		V2.1.2
	7302XD	EBLT-C	ADSL1/2/2+	Broadcom 6411	48	3.7	V4.18.0
		EBLT-E	ADSL1/2/2+	Broadcom 6411	48		V4.18.0



Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
ECI	<b>MiniCAB 48x</b>	Integrated in the box	ADSL1/2/2+	Infineon	48	v. 9.1.43	7130427
	<b>MiniCAB 64x</b>	Integrated in the box	ADSL1/2/2+	Infineon Geminax	64	v. 9.1.43	71b0827

Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
Huawei	<b>MA5600T</b>	H8-ADPD	ADSL1/2/2+	Infineon Type: PEF 55016 E V2.1-G	64	V8R15	08.2B.06.00.32
		H807ADPD	ADSL1/2/2+	Broadcom Type: BCM6512IPBG	64		V10.08.61
		H802SHGM	SHDSL	Infineon Type: PEF 24628 E V1.2	32		1.8.0
		H80-SHLB	SHDSL	Infineon Type: PEF 24628 E V1.2	16		1.8.0
	<b>MA5606T</b>	H8-ADPD	ADSL1/2/2+	Infineon	64	V800R005C23	07.1B.08.00.27
	<b>MA5616</b>	H835-ADLE	ADSL1/2/2+	Broadcom	32	V800R313C00	10.7.35

## 5 IP ADSL MSAN FOR TIM FTTCAB DEPLOYMENT

This section describes the HW/SW list of the ADSL IP MSAN equipment for TIM FTTCab deployment.

Equipment Vendor	Equipment Model	Line Card Name	Line Card Type	Line Card Chipset	Card Ports Number	Equipment SW Release	Firmware Version xDSL chipset
Nokia	7302FD	NALT-J	ADSL1/2/2+	BCM 6518/6522	48	5.6.02f	V13.9
		NSLT-A	SHDSL	IFX_SHDSL	24		2.1.4
		NSLT-C	SHDSL	IFX_SHDSL	24		2.1.4